Norms and Standards for Social Housing

Social Housing Regulatory Authority and Department of Human Settlements

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1 Introduction

1.1 The purpose of this document and what it covers

The Social Housing Regulatory Authority's (SHRA's) mandate is to capacitate, invest in and regulate the social housing sector. The primary intention of social housing is twofold: firstly, to deliver affordable rental housing for low to middle income groups and secondly, to achieve spatial, economic and social integration of the urban environments in South Africa. Towards that end the SHRA is focused on facilitating the delivery of quality, sustainable social housing at scale to advance the needs of low- and middle-income groups in support of spatial, economic and social restructuring[1].

The stated objectives of the Rental Housing Amendment Act No. 35 of 2014 are, in summary:

- Promote the provision of rental housing
- Ensure a functioning rental housing market
- Facilitate sound relations between tenants and landlords
- Provide legal mechanisms to protect the rights of tenants and landlords respectively

It also empowers the Minister of Human Settlements to institute regulations and specifically obliges the Minister to issue regulations regarding norms and standards of rental housing that are aligned with the policy framework. These regulations must inter alia address safety, health and hygiene; basic living conditions including access to basic services; size; overcrowding; and affordability.

Accordingly, this document sets out norms and standards for social housing. The norms and standards are not intended to be prescriptive but rather to provide a framework of guidelines and principles that will enable high quality social housing to be developed that meets the mandate of the SHRA and the Department of Human Settlements, while at the same time is flexible and enables social housing to be developed in a manner that is responsive to the market and enhances the lives of the tenants living in the units.

This document commences in this section (section 1) with a definition of social housing and an outline of what is meant by norms and standards. Section 2 sets out an understanding of the key terminology. Section 3 outlines the key principles for quality social housing. Section 4 sets out norms and standards for a social housing unit and Section 5 the norms and standards for a social housing development.

1.2 Defining Social Housing

The Social Housing Act (No 16 of 2008) states that, "social housing' means a rental or co-operative housing option for low to medium income households at a level of scale and built form which requires institutionalised management and which is provided by social housing institutions or other delivery agents in approved projects in designated restructuring zones with the benefit of public funding."

[1] SHRA Annual Report, 2017/18

By definition therefore, key differentiators between social housing and commercial / developer driven multi-unit residential developments is an underlying socio-economic imperative to deliver managed housing in specific localities. The "social" aspect of social housing is implied through a qualitative agenda – in accepting public funding the compact is to enable delivery beyond a certain qualitative threshold.

Accordingly, the key differentiators between social housing and other forms of rental accommodation are:

- Location
- The qualitative aspect of the unit in terms of space norms
- The provision of social amenities
- Management

The successful design of a good quality sustainable social housing project depends on achieving a balance between a range of factors. These include issues such as accessibility, safety and security, access to services and amenities and the provision of adequate space. A sustainable housing project should also contribute to its environment by becoming part of its neighbourhood context and fostering a social network between residents and the community. The dwelling unit must meet the needs of the lifecycle of a family from children to adults, to older people and people with forms of special needs or disability that don't require specialised institutional care, therefore designs should be flexible and adaptable to meet these demands over the life of the building.

1.3 Overview of Policy, Legislation, and Regulations

1.3.1 General

The more recent National Housing Code (2009), the Neighbourhood Planning and Design Guide (2019) (the revised version of the Guidelines for Human Settlement Planning and Design known as the 'Red Book') and the National Home Builders Registration Council (NHBRC) Home Building Manual do, to varying degrees of detail, contain guidelines or standards in respect of human settlements and housing in general. The revised Red Book's stated purpose is to *"provide practical information related to the planning and design of the range of services and infrastructure typically provided as part of a neighbourhood development project. The application of the guidelines should ultimately result in the delivery of infrastructure and services that are effective and efficient and that contribute to the creation of sustainable human settlements."*

Generally these guidelines are not intended to be prescriptive, or to be regarded as suggesting minimum standards or regulations.

The following table taken from the Neighbourhood Planning and Design Guide (the Red Book) illustrates the relationship between the broader policy framework and specific instruments to achieve the outcomes of the framework.

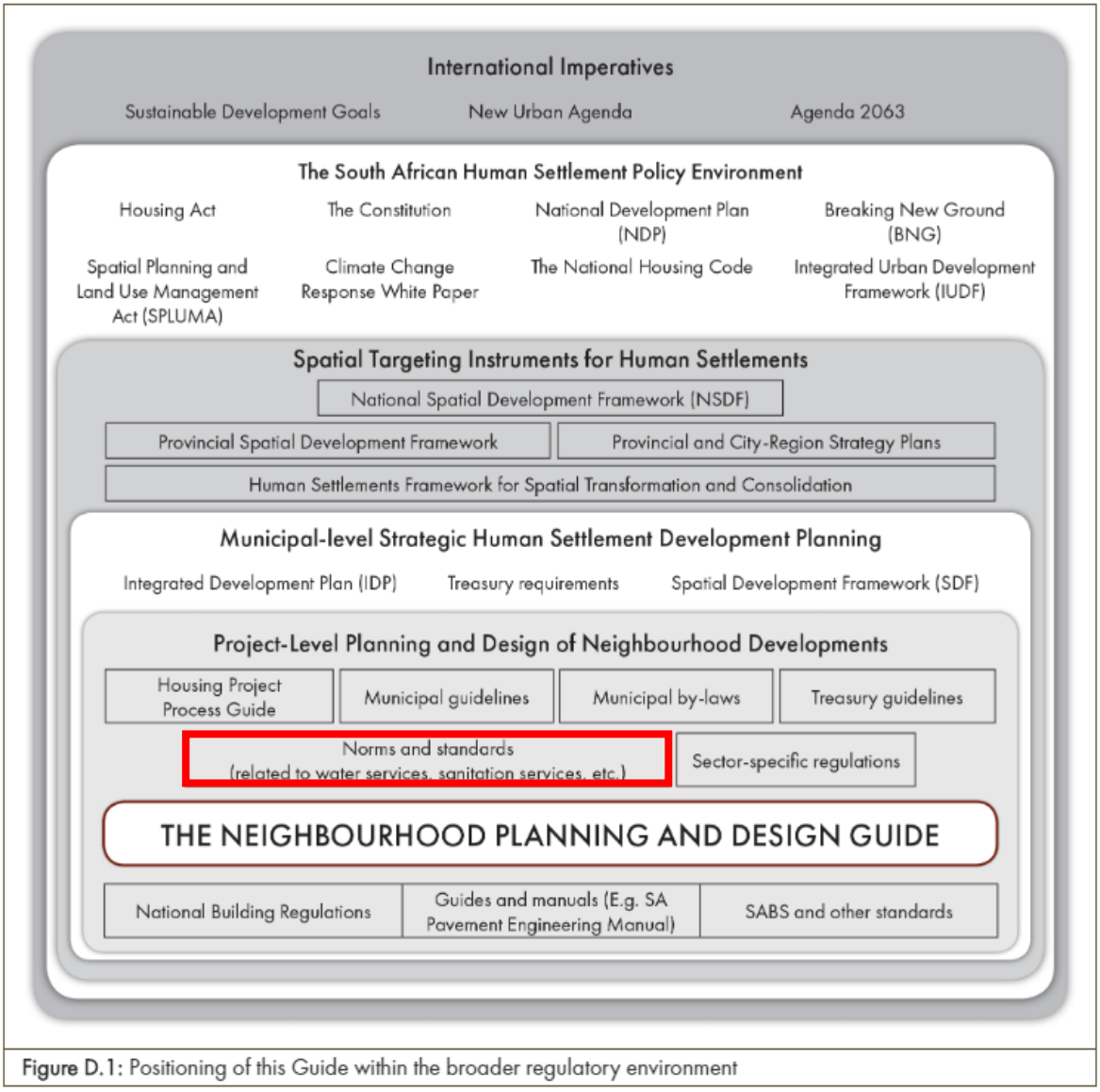


Figure D.1: Positioning of this Guide within the broader regulatory environment

Source: *https://www.dhs.redbook.gov.za/*

In all cases, the National Housing Code, Red Book and NHBRC Home Building Manual make some reference to the National Building Regulations and Building Standards (NBR) Act, 103 of 1977. In applying the NBR and to ensure 'deemed to satisfy' compliance, there is also the supplementary Codes of Practice, the National Building Regulations, SANS 10400. They set out the requirements to ensure that buildings are designed, built and maintained in such a way that their intended use or habitation provides a healthy and safe environment to users and occupants. It is acknowledged in the Codes that there are other aspects to buildings that affect the level of comfort and/or convenience of users and/or occupants (for example, should parking be a norm as part of the leased property and if so, open or covered), but as these are very subjective in nature, specific guidelines or codes of practice have not been prescribed and even if there were, they would be very difficult to tangibly measure and thus control or enforce through legislation and regulations.

While the aspect of 'habitability' is quite comprehensively dealt with in the NBR, The Rental Housing Amendment Act has now also introduced 'habitability' to the Act and given a definition of 'habitability' as a dwelling that is safe and suitable for living in and includes:

- adequate space;
- protection from the elements and other threats to health;

- physical safety of the tenant, the tenant's household and visitors; and
- a structurally sound building.

While not too dissimilar to that defined in the NBR, the NBR (SANS 10400) has provided substantially more tangible descriptive and measurable technical detail for 'habitable' so as to avoid the notion of 'habitable' falling into the realm of the subjective and unmeasurable. Linked to the above, the Rental Housing Amendment Act has further defined maintenance being the repair and upkeep as may be required to ensure that a dwelling is in a habitable condition. Further, in its section of rights and obligations of the landlord, the landlord must provide a tenant with a habitable dwelling, maintain the existing structure of the dwelling and where possible facilitate the provision of basic services to the dwelling.

Given the use of words of 'building' and 'structure' in the above, it is implied, or could reasonably be interpreted, that the physical rental accommodation is 'fixed' and of a 'permanent' nature. ***For the purposes of this norms and standards document, as an extension to 'Social Housing rental housing' definition given in item 1.2 above, all 'rental property', irrespective of whether single room or house or a multi-unit building, is taken as being a fixed property/site with permanent improvements/building.***

In addition to the Rental Housing Act, its' Amendment and the above, there is also a plethora of other existing legislation pertaining either directly or indirectly to human settlement, housing and rental generally, such as inter alia:

- The Constitution of the Republic of South Africa, 108 of 1996, and the Bill of Rights
- National Housing Act, 107 of 1997, and Amendments, 1991 and 2001
- The Formalities in Respect of Leases of Land Act, 1969
- The applicable provisions of the Consumer Protection Act, 2008 and its final Regulations of 2011 (relevant in respect to disclosure of information, fair value)
- The Sectional Title Scheme Management Act as amended (particularly relevant for landlords of a sectional title unit and the maintenance obligations thereof between landlord, body corporate and tenant)
- Respective Municipal by-laws and Town Planning Ordinances
- The Estate Agency Affairs Act, 1976 (if estate agent is the landlord)
- The Prevention of Illegal Eviction From, and Unlawful Occupation of Land Act, 1998
- The Immigration Act 13 of 2002 (provisions in respect of legal residency and/or being legally entitled to contract for residence)
- The Social Housing Act 16, 2008
- Breaking New Ground: Comprehensive Plan for Housing Delivery (BNG), 2004
- Other National, Provincial or Municipal Specific Housing Policies

1.3.2 Policies, Programme guidelines, Acts, Regulations pertaining to Social Housing in particular

Social Housing Policy for South Africa, May 2005: Section 4.1 of the policy, dealing with the Target Market for social housing that the typical nuclear family is not a predominant household in South Africa, and thus, the Policy acknowledges that the "…demand for social housing implies a wide product range, including rooms with shared facilities, communal housing, short stay accommodation…"

The policy acknowledges the need for units that are "unavoidably small out of financial necessity…", and stresses the importance of the overall environment for relief in this regard. It furthermore states that projects will "conform to and exceed the norms and standards set by the Minister…, the National Building Regulations…and the NHBRC", but envisages that "…best practice benchmarks will be continually developed…that the sector itself will develop and which the regulator will

enforce." The policy does not therefore, explicitly set space norms, nor excludes non self-contained units such as communal housing.

Social Housing Policy has since been incorporated into the 2009 National Housing Code, and it is this document, together with the 2008 Social Housing Act and its accompanying Regulations that one should look to for guidance in this regard.

Social Housing Programme Guidelines, November 2006: These were interim operational guidelines to support the operational roll-out of the Social Housing Policy prior to the revised 2009 National Housing Code, the 2008 Social Housing Act and 2012 Regulations, and establishment of the SHRA, and are not regulations.

For instance, Annexure 5.5, "Minimum Specifications for Social Housing Units", prescribe that social housing units must be at least $30m^2$ in size for newbuilds, refurbishments and conversions, and "self-contained, i.e. have a separate bathroom and, at least a kitchen area if it is a bachelor unit"

Since there was no prescription that units must have lounges, dining areas, etc., presumably one could also have units with one or more bedrooms only without living areas, as long as the unit is self-contained with its own bathroom and kitchen area.

The effect of these guidelines was that the following more affordable options were excluded from the Programme:

- Smaller and more affordable bachelor/studio units that can be quite effectively designed with floor areas of 18 to $25m^2$
- communal forms of accommodation where ablution and other facilities are shared by a number of rooms or flatlets

There is a reference in the Social Housing Act that may be deemed to link the Housing Design Criteria directly to the Minimum Specifications in these Guidelines, namely clause 14(2)(b) which says that SHIs must comply with provisions of government programmes and guidelines, as updated. It is these last words "as updated" that leads to the reasonable conclusion that the Social Housing Act in 2008, the Regulations under it (2012), and the National Housing Code, 2009 have superseded these 2006 Guidelines. Thus, these guidelines from 2006, since never gazetted as regulations, are deemed as no longer binding on social housing norms and standards. The prescript of a 30m2 minimum unit size no longer exists in any current regulatory rules.

The Social Housing Act, 16 of 2008: Clause 2(1)(a) states that spheres of government and SHIs must "ensure their respective housing programmes are responsive to local housing demands, and special priority must be given to the needs of women, children, child-headed households, persons with disabilities and the elderly"

Although not explicitly stated, this implies that forms of communal and special needs housing must be provided. This principle is further reinforced in many parts of the 2009 National Housing Code.

Clause 14(2) states that SHIs must function in compliance with:

- provisions of social housing programmes and guidelines of government (b)
- ministerial norms and standards in respect of permanent residential structures (c)
- the NBR and technical standards of the NHBRC (d) and (e)

It has already been shown above that neither the NBR, nor the NHBRC technical requirements contain any prescriptions with regard to unit types and sizes. The ministerial norms referred to are contained in the Housing Code and apply to the construction of standalone residential dwellings on individual erven (BNG) rather than multi-unit multilevel buildings, and this reference is therefore, considered inappropriate for social housing. It should be amended to refer to norms and standards

to be developed by the sector and SHRA specifically for social housing, which is the objective of the current assignment. The Act contains no further references to technical elements.

Social Housing Act Regulations, 2013, Chapter 5 – Investment Criteria: Regulation 20, Housing Design Criteria, includes stipulations that state *inter alia:*

> *(Section 4) The design of individual units must comply with the minimum standards laid down in the Housing Code and Building Regulations with respect to unit size, room size and level of finishes.*

This is notable as neither the Housing Code nor the Building Regulations provide any rules with regard to unit types or minimum unit sizes for social housing.

> *(Section 5) Housing must comprise of medium to high density units. Free standing units on individual erven are not eligible.*

This further reinforces the contention that the technical Norms and Standards contained in Part 3, Volume 2 of the Housing Code (which explicitly apply only to standalone dwellings on individual erven) have no bearing on multi-unit, multi-level social housing developments. Additionally, the minimum 30m2 size for BNG housing has been revised to 40m2.

> *(Section 6) A range of accommodation options must be offered, from bachelor to three-bedroom units.*

This clause is incongruous with all other current social housing policy documents and should be amended to read: **"A range of accommodation options should be offered, from rooms with communal facilities, to self-contained flats and apartments."**

The regulations, therefore, do implicitly state a requirement for self-contained units, but no reference to a minimum unit size. The apparent requirement for self-contained units could be seen as a limiting factor in the application of appropriate, demand responsive norms, and the necessary amendments as suggested above, should be considered and pursued by SHRA and the Department.

National Housing Code, 2009: The National Housing Code (2009) sets the underlying policy principles, guidelines and norms and standards which apply to Government's various housing assistance programmes introduced since 1994. It is considered reasonable to conclude, from the language in the National Housing Code, that this document supersedes other prior documentation. The National Housing Code (2009) is aimed at simplifying the implementation of housing projects by being less prescriptive while providing clear guidelines.

The only specific reference in the Code to technical norms and standards is Section 3, "Technical and General Guidelines" containing the "Revised Technical Norms and Standards for Stand Alone Residential Dwellings". Thus, the above norms and standards cannot be applied to medium density multi-unit, multi-level buildings. The statement in the section of the Code on Institutional Subsidies, that these Norms and Standards apply is therefore, somewhat incongruous.

In Part 3, Volume 6 of the Code, Social and Rental Interventions, Social Housing Policy, Section 4.1 clearly allows for the programme to benefit a range of people, from singles, singles co-habiting to different kinds of households.

The Housing Code therefore, as it pertains to social housing, contain no specific prescripts with regard to unit types, sizes, layouts, space norms or any other dimensional aspects of design.

Conclusion – regulation of typological and dimensional aspects of social housing units

Despite the common edict in most of the social housing specific instruments that projects must conform to the NBR and NHBRC technical requirements, and the norms and standards of the Housing Code (which strictly speaking apply to stand alone individual dwellings only), there appears to be no consistent set of technical/dimensional norms for social housing, with the existing

regulations of the Act limiting the flexibility required to offer a greater range of options that could reduce costs, increase demand responsiveness, affordability and reach in the deep down market segment.

The current assignment, with the objective of developing consistent and comprehensive Norms and Standards for the social housing sector, is aimed at bridging the fragmentation/gap that exists and bring all norms and standards for social housing together under one roof, as far as possible within the rules of the existing legislative and regulatory framework, while at the same time ironing out constraining inconsistencies and perceptions about what is allowed and what not.

1.4 What are norms and standards and why do they matter?

Good design matters. South Africa's history of spatial exclusion and inequality remains stubbornly entrenched in the urban fabric of South Africa's cities. Spatial transformation is intrinsically linked to place making and the provision of quality housing environments that are healthy, safe and secure.

Well designed and well-located housing enhances the social and economic value of housing. Therefore, it is important that housing is not only well constructed, meeting a set of building standards and material specifications, but should also meet a set of qualitative standards that address issues such as space standards, typologies and environmental issues.

Challenges that are occurring due to climate change also require consideration in terms of ensuring that buildings can cope with rapidly changing temperatures and that the use of scarce resources such as water is optimised.

In introducing 'norms and standards' for Social Housing we seek:

- CONSISTENCY but not UNIFORMITY
- MINIMUM COMPLIANCE but MAXIMUM QUALITY
- MARKET RESPONSIVENESS and FLEXIBILITY

2 Structure and Approach to the Document

2.1 Overall Approach

The basis of the approach is that 'residential rental accommodation' has three components:

- **The 'property'** (the land on which the dwelling/s are situated on) and where predominantly applicable legislation/regulations are municipal ordinance and by-laws and the NBR (SANS 10400 that includes 'deemed to satisfy' codes of practice).
- **The 'building'** and where the predominantly applicable legislation/regulation is again the NBR (SANS 10400), as well as SANS10142 for electricity. Depending on both the building type e.g. single dwelling, sectional title or even a rural farmstead, other legislation and regulations may also apply (for example the Sectional Title Scheme Management Act).
- **The 'lease'** which regulates the relationship between the landlord and tenant and where, in addition to the Rental Act (applicable to all three components to varying degrees but most applicable to the relationship/lease) and Sectional Title Scheme Act (where accommodation rented is in a sectional title scheme), other legislation such as the Consumer protection Act or Immigration Act (person allowed 'legal residence') may also apply.

While all of the provisions of all the different acts and regulations may not be applicable, some inconsistencies in either the provisions or in the way they could be interpreted seem apparent. To this end, it is unclear which legislation would take precedence in the event of an inconsistency or conflict. ***Until there is further clarity on this, for the purposes of this document, where reference is made to a specific act, regulation or guideline in the following 'norms and standards' sections, the intention is that compliance with the referenced item is the required norm and/or standard.***

2.2 Key Terminology

Encouraging quality delivery within the housing environment can be approached in various ways, some focused on prescriptive dictates while others aimed at providing broad parameters for guidance. Set out below are the different types of mechanisms used:

1. **Design guidelines**: Design guidelines identify the broad qualitative parameters required to guide the design of developments and are inter-related to norms and standards.
2. **Norms and standards**: Norms and standards typically refer to documents that specify and define a set of common criteria, methods and procedures that must be used to achieve a benchmark in terms of compliance.
3. **Technical specifications**: Specifications typically refer to a range of standards for materials to be used, quality of workmanship, methodologies and tests to be performed and so on. Technical specifications are applied to achieve compliance with core standards.
4. **Statutory compliance**: Building Regulations establish a set of minimum standards that must be achieved in the design and construction of buildings. They are supported by a series of approved documents that provide guidance about how the regulations can be satisfied in common building situations, and these in turn are supported by a wide range of reference documents. Statutory compliance is made up of:

- **Core standards**: It is a given that all developments must demonstrate compliance in terms of the National Building Regulations and Building Standards Act 1997, SANS 10400, as well as a series of Normative References and Standards as issued by the SABS Standards Division such as SANS2001. SANS 10400 sets out a series of compliance routes; deemed to satisfy requirements, functional regulations and prescriptive regulations including for example:
  - *Deemed to Satisfy Requirement*: This is a non-mandatory requirement, the compliance with which ensures compliance with a functional regulation
  - *Functional Regulation*: This is a regulation that sets out in qualitative terms what is required of a building or building element or building component in respect of a particular characteristic, without specifying the method of construction, dimensions or materials to be used.
  - *Prescriptive Regulation:* This is a regulation which describes in some detail an operation to be performed, or the dimensions of a building, building element or building component and the materials and method of construction to be used in such building, building element or building component.
- **Conditional Requirements:** Denotes compulsory elements of design, quality, performance, etc. In the context of submission made to SHRA, if these requirements are not met, then the submission cannot proceed any further.
- **Certifications:** Certifications that utilise a rating system such as the GBCSA Green Star or EDGE Programmes create a platform for measurement of green or resource efficient buildings. The rating systems and tools create a common language and standard of measurement for green buildings, promoting integrated, whole-building design.

Design guidelines, norms and standards and specifications all work together to achieve statutory compliance at along different dimensions (see figure below). In principle, Guidelines are intended to assist decision making, whereas standards are normally considered as measurable, enforceable limits. This document focuses largely on Norms and Standards, with some elaboration on design guidelines, specifications, and statutory compliance as deemed necessary.

Figure 1: Qualitative and Compliance Parameters

2.3 Approach to specifications within this document

Technical specifications for building and construction projects typically refer to a range of standards for materials to be used, quality of workmanship, codes of practice and methodologies and tests to be performed in order to achieve compliance with core standards.

These minimum specifications, forming part of, and taken together with other parts of this document constituting the social housing norms and standards, and all associated external documents are intended to assist the Social Housing Regulatory Authority (SHRA) and the sector with:

- Ease of regulating the sector by providing a set of rules and guidelines that are easily understood by both the regulator and the sector
- Bringing social housing practice in line with constantly changing environments and innovation in design and construction, including introducing green initiatives to enhance sustainability through more resource-efficient design and construction practices

In addition, the minimum specifications will serve as legal and contractual obligation between the SHRA and delivery and managing agents operating in the sector.

Social Housing delivery agents (SHIs and ODAs) should develop standard minimum specifications for their developments in line with their own standards and in response to the unique requirements of their development and operating environments. Yet, they should also strive to develop products in accordance with these Norms and Standards. Specifications should be developed with a view to being outcomes based, and flexible in order to promote responsiveness to context and innovation. To this end, standard specifications must be amended and/or augmented with supplementary preambles to meet the unique needs of every new project. Standard and supplementary preambles must be submitted with each application to the SHRA for project approval and funding for assessment in accordance with the norms and standards.

As with the norms and standards, the specifications are not intended to be a prescriptive list of building methods and technologies, materials and finishes for social housing developments, but rather to provide a framework of guiding principles that will enable high quality social housing to be developed that meets the mandate of the SHRA and the Department of Human Settlements, while at the same time is flexible and enables social housing to be developed in a manner that is responsive to the market, open to innovation, and enhances the lives of the tenants living in the units.

In this way a relationship is set up between the Norms and Standards at a SHRA level and the response by the SHI. This allows SHI's to develop project specific specifications and even organisational specific specifications that are contextually and market driven.

Development and application of specifications should follow the approach of the National Building Regulations (NBR) (SANS 10400 series). The content of these and other regulatory prescripts are not repeated or summarised in the body of this document, and no reference is made to specific regulations, codes and standards. Where deemed necessary to draw the attention of designers, developers and constructors of social housing to specific regulations or codes, such references are made in the Norms and Standards in relation to specific sections.

Use of Model Preambles for Trades:

These minimum specifications should be used in conjunction with the latest available edition of Model Preambles for Trades published by the Association of South African Quantity Surveyors, and any preambles supplementary to it, or similar industry-based Model Preambles, and included in the project tender and contract documentation. The Model Preambles augment these minimum specifications with comprehensive references to South African National Standards (SANS), and compiling Specifications for particular materials or methods where SANS Specifications or Codes do not exist.

2.4 Considerations for Operations and Maintenance

Although the NBR deals mainly with design and construction, it also has a section on maintenance after occupation, placing responsibility on the owner to maintain the buildings in the same safe and healthy state as approved for construction originally.

Due to the importance and general ignorance and neglect of this provision, attention is drawn specifically to the following excerpt from the NBR (NBR Section A15 Maintenance and Operation:

(1)

A. The owner of any building shall ensure that any mechanical equipment, facility or any service installation provided in or in connection with such building, pursuant to these regulations or pursuant to any building by- law which was in operation prior to the coming into operation of the Act, shall be maintained in a safe and functional condition.

B. Such owner or any person appointed by such owner to be in control of such building shall ensure that where such equipment, facility or installation is designed to be kept operating during the times of normal occupancy of the building, it is kept operating in such a manner as to attain any standard of performance prescribed in these regulations or in any by-law for such equipment or installation.

. (2) The owner of any building shall ensure that pursuant to these regulations or pursuant to any building by-law that was in operation prior to the coming into operation of the Act, the following is maintained in accordance with the requirements of the relevant functional regulations contained in Regulations B, H, J, K and L:

A. the structural safety performance (behaviour of buildings under all actions that can be reasonably expected to occur);

B. the measures taken to resist the penetration of rain water and the passage of moisture into the interior of a building.

. (3) The local authority may serve a notice on such owner or person requiring him to comply with sub regulation (1) or (2) within the time specified in such notice.

. (4) The local authority may, by notice, in writing to the owner, order the evacuation of such building where the state of such building, equipment, installation or facility will cause conditions which in the opinion of the local authority may be detrimental to the safety or health of the occupiers or users of such building.

. (5) Any owner or person who contravenes the requirements of sub-regulation (1) or (2) or fails to comply with any notice served in terms of sub-regulation (3) or (4) shall be guilty of an offence.

The above is important to note when designing and preparing construction specifications as thought should be given to the longevity of items specified, the maintenance requirements and lifecycle costing. This regulation places a clear legal liability on all building owners to maintain their buildings in a state of safe habitability. Normal wear and tear is permitted, but when it gets to the point where it affects structural and fire safety, health of occupants and all the other aspects regulated for construction, repairs must be carried out, otherwise the owner will be in breach of the statute and the original occupancy certification, as well as most likely rendering the building and the owner's third party liability towards occupants and the public uninsurable.

2.5 "Living Document" Approach

This Norms and Standards document is viewed as a starting point for the sector, aimed to be updated regularly through a process to be established by the Regulator, private sector stakeholders, and sector advocacy bodies. This document should be viewed as a "living document," one that acknowledges the complexities of built environment development, the regular occurrence of innovations, and the challenges of market dynamics all require iteration on a frequent basis.

Practice Notes are aimed at providing guidance on aspects that require significant consultation and discussion with the sector. The objective is to encourage a structured approach to introduce innovations into the document as well as ensure the sector is provided opportunity to develop consensus on contentious issues. It is proposed that this done through a community of practice on key thematic concerns and ensure the Norms and Standards remain relevant to developments and changes within the sector. This would allow the sector to develop common approaches to specific challenges thereby developing and sharing experiences in relation to complex challenges and methodologies (for example developing a calculator for lifecycle costing or hot water systems) and to respond to new technologies, materials and approaches (for example green technologies which are swiftly changing).

Accordingly, a series of Practice Notes is proposed. These Practice notes would be aimed at:

a) providing guidance on aspects that require significant consultation and discussion with the sector. The objective is to encourage a community of practice on key thematic concerns and ensure the Norms and Standards remain relevant to developments and changes within the sector

b) Providing specific guidance on how to approach specific items.

The areas provisionally identified that will be appropriate for practice notes include the following:

Table 1: Items for Practice Notes

Overarching item	Sub-item	Practice Note Reference
1.3 Overall Building design in relation to site & context	1.3.1 Hierarchy of Spaces & Place making	Practice note on "place-making" to be developed.
2.1 Building Design	2.1.2 Orientation: Solar Heat Gain & Shading	Practice Note on solar orientation to be developed.
2.3 Maintenance and management	2.3.1 Operations Manual	Practice Note on Operations Manuals should be provided.
2.3 Maintenance and management	2.3.2 Maintenance schedules	Practice Note on maintenance planning to be developed
3.3 Services	3.3.2 Services: Hot Water Provision	Choosing and evaluating a hot water system
3.4 Maintenance & Management	3.4.1 Material Specifications: Common Areas, Lobbies, Passages	Practice Note on materiality to be developed
3.6 Sustainability	3.6.1 Lighting	Practice note on lighting to be developed

Overarching item	Sub-item	Practice Note Reference
4.1 Design: Space norms and standards	4.1.1 Unit Design	Practice note to be developed on unit mix and principles per unit type.
4.1 Design: Space Norms & Standards	4.1.2 Unit Size	Practice Note to be developed on unit sizes and design parameters within unit types and definition of the method of measurement.
4.1 Design: Space Norms & Standards	4.1.3 Mix of unit types & sizes	Practice note to be developed on unit mix and principles per unit type.
4.2 Design of Unit	4.2.1 Unit Plans: Space Planning	Practice Note to be developed on planning for retrofits
4.2 Design of Unit	4.2.3 Kitchen Area: Space Planning: Self Contained Unit	Practice Note to be developed on kitchen design and elements.
4.2 Design of Unit	4.2.5 Bedroom (main)	Practice Note to be developed on bedroom requirements
4.2 Design of Unit	4.2.6 Bedroom (second)	Practice Note to be developed on bedroom requirements.
4.3 Materiality: Specifications	4.3.1 Floors	Practice Note to be developed
4.3 Materiality: Specifications	4.3.6 Materials: Finishes	Practice Note on specifications techniques to be developed
4.5 Maintenance & Management	4.5.1 Building User / Occupants Guide	Practice Note to be developed on Tenant's guide
4.6 Accessibility	4.6.1 Bathroom Design	Practice Note to be developed: Accessibility Retrofitting Guidelines
4.6 Accessibility	4.6.2 Accessible Kitchens	Practice Note to be developed
4.7 Sustainability	4.7.1 Lighting Internal to Unit	Practice Note to be developed
4.7 Sustainability	4.7.4 Use of sustainable Materials	Practice Note to be developed
5.1 Communal Amenities	5.2.2 Kitchens	Practice note on ratio to number of units to be developed.

The above could be consolidated into specific thematic areas, along the proposed following lines:

- Building Orientation and Placemaking: reconciling optimal orientation with placemaking
- Space Planning and planning for retrofitting
- Accessible Design for Persons with Disabilities and Accessibility Retrofitting Guidelines
- Materiality and Specifications: Methodologies for specifying materials / services etc, sustainability, lifecycle costing methodologies

- Choosing & evaluating hot water systems
- Guidance: Maintenance Planning / Operations Manuals / Building User Guides

2.6 The key principles for quality social housing

The key principles for good quality sustainable social housing developments are set out below. These principles form the guiding framework for the norms and standards sets out in the sections that follow.

1. **Socially and environmentally appropriate:** The type of units, services and amenities should be appropriate to the people to be accommodated. The mix of dwelling type and size should support the social, environmental and economic sustainability objectives of the development.
2. **Architecturally appropriate:** The development should provide a pleasant living environment which responds to its context, enhances its neighbourhood and respects its heritage.
3. **Functional**: The design should best meet the requirements of the intended purpose. Units must accommodate the everyday needs of residents in terms of accommodating their furniture and their requirements in terms of cooking, eating, sleeping, washing and socialising.
4. **Accessible and adaptable**: Dwellings should be capable of adaptation to meet the changing needs of residents. There should be ease of access and circulation for all residents to move through the development and to use the services and amenities provided.
5. **Safe, secure and healthy:** The development should be a safe and healthy place in which to live.
6. **Affordable:** The development should be able to be built, managed and maintained within the cost parameters of providing affordable rentals.
7. **Durable:** Construction techniques and materials should have a service life of that provides acceptable performance over the life of the building without the need for abnormal repair or replacement at intervals shorter than general industry benchmarks.
   The balance between lifecycle costing and initial capital outlay must always be balanced.
8. **Resource Efficient:** Efficient use must be made of land, infrastructure, water and energy. The building should optimise the benefits of orientation, daylight and solar gain. The use of scarce natural resources in the construction, maintenance and management of the buildings should be minimised.

The above principles are utilised in each sub-section of the document to inform and shape the approach and content of each sub-item with regard to the underpinning Principles, the Guidelines and the recommended Norms and Standards pertaining to the sub-item.

2.7 Differentiation between typologies (Greenfield, brownfield, etc)

Increasingly, social housing projects are undertaking brownfield inner city conversions and refurbishments. This trend is largely a function of better utilization of valuable and strategic inner - city properties through redevelopment in the form of mid-rise newbuilds with lifts (in some instances, this also covers towers or apartment tower blocks).

For this reason, it is intended that these Norms and Standards will apply to all types of social housing development as described below.

Different authors, commentators and practitioners attach slightly different attributes to the terms ***"greenfield"*** and ***"brownfield"*** respectively. Rather than trying to arrive at a universal definition, we have defined the terms as follows for the purposes of these Norms and Standards:

Greenfield development:

Construction of new buildings on vacant sites, usually requiring legal conversion of development rights (township establishment, rezoning or other formal town planning procedure), new connections to external bulk infrastructure services grids of the local authority, and varying levels of installing new internal infrastructure services.

A common perception is that greenfields projects are always located in uninhabited and undeveloped areas at the urban periphery. In this Norms and Standards document however, greenfields can also refer to undeveloped parcels or pockets of parcels of infill land in already developed and inhabited areas.

These parcels are deemed completely vacant, but in some cases may have rudimentary or dilapidated structures on them that need to be demolished and the land rehabilitated in preparation for new construction.

Brownfields development:

The re-development of existing properties, either for the same use or for conversion to a different use. For our purposes these properties are almost always located in the midst of areas that are already well developed and inhabited, with existing connections to the bulk infrastructure services grids of the local authority, and often, but not always, with pre-existing development rights that will cater for the proposed new form of use.

The redevelopment may take the form of refurbishment for the same or similar use, or conversion to a new use, and although in the main the existing buildings on the site will be retained, projects may in some instances involve partial demolition, alteration and addition.

Refurbishment, upgrade, conversion:

Acquiring existing buildings and preparing them for residential dwelling purposes can take one of two basic forms, or a combination of both:

1. *Refurbishing or rehabilitating* existing residential buildings (blocks of flats, townhouses, etc.) for continued residential use, in other words no change in use is brought about. Depending on the state of the building, this could entail minor *rehabilitation* or *repair* (repainting, fixing broken components, replacing worn carpets, etc.), or more extensive *renovation* or *upgrade/refurbishment.* Renovation or refurbishment results in an essentially new building within the framework of an old one. The latter may require changes in layout and new services installations to comply with new fire safety regulations and building codes, and usually involves complete or partial tenant evacuation
2. A*daptive re-use* or *conversion*, where a building that was originally designed for another type of use (offices, schools, etc.) is turned into a residential building.

Some buildings were originally built for mixed use, for instance a block of flats with shops or offices at ground level. The SHI may decide to retain the mix and simply renovate, or it may decide that it is more appropriate to convert all or some of the shops and offices into dwelling units as well.

In this report we will use the term *refurbishment* interchangeably for repair, upgrade and renovation of existing residential buildings (no change in use), and *conversion* for all cases where a change in use is affected.

In rare cases there may also be elements of *restoration* involved, that is an attempt to restore the original design or historical concept of the building by stripping it of later additions and putting back or repairing original details and materials. This Norms and Standards document does not address restoration projects.

Newbuild / greenfield mid to high-rise or towers development:

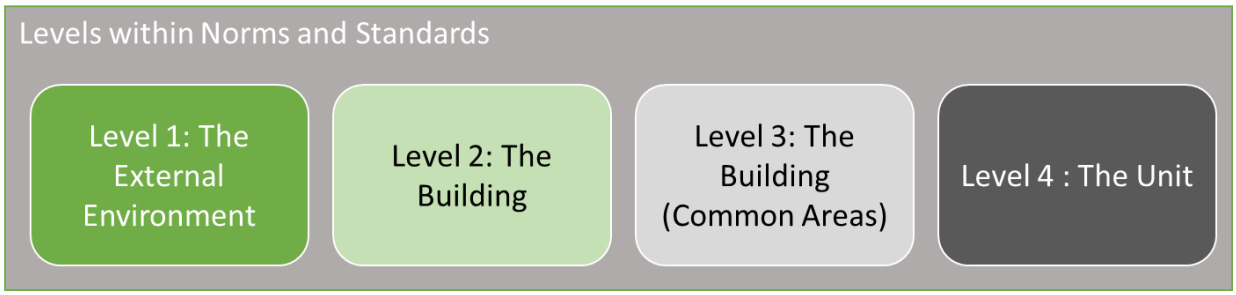
Greenfield medium density social housing development to date has been mainly in the form of two to four storey walk-up rows, clusters and blocks with no lifts and access to upper floors via external pedestrian stairs and walkways, open or covered. The main reasons for the four-storey upper limit have been land use zoning considerations and the fact that when a building rises beyond four storeys it becomes a legal requirement to install a lift or lifts, which has significant cost implications.

Although some brownfield refurbishments and conversions have been done on high-rise buildings or towers, there have been very few cases of newbuild towers social housing in South Africa. It is expected that newbuild mid to high-rise towers will increasingly become a form of social housing in the future, and these Norms and Standards are therefore, intended to apply to such building types as well.

2.8 Approach to document sections

The norms and standards are structured in a hierarchy, starting at the site and contextual framework level and working through to the detailed requirements of the unit. Four levels are provided for:

Figure 2: Norms and Standards Levels



The norms and standards are set out in a table that includes the following:

- **Overarching item**: This term refers to specific thematic elements within the levels defined. (For example, the overall context of a development).
- **Sub-item:** This element refers to a specific area of focus within themes and provides more detail on particular components of overarching items.
- **Principles:** These are the high-level key outcomes desired by the particular sub-item.
- **Guidelines**: Applicable good practice on a particular topic informed by knowledge, understanding and experience of practitioners in the field and their professional advisors. This is an explanation of how the general principles are to be achieved.
- **Norm and standard**: This is the compliance levels that must be achieved. Within this section it is noted whether this item is a "Conditional Requirement" for funding by the SHRA.
- **Required documentation for evidence**: This lists the required evidence that must be submitted in order to show how the project achieves compliance with the norms and standard.
- **Practice Note Reference**: A Practice Note gives guidance on how to achieve compliance as well as additional explanatory information. These shall relate, provisionally, to the areas identified in the individual sheets following, and as listed in Section 2.4 above. These may be issued from time to time.

2.9 Conclusion and Matrix of Typologies

A summary of the overarching items and sub-items covered in the norms and standard (per building typology) are shown in Table 2 overleaf

The table is a matrix indicating for ease of reference the applicability of each sub-item in the sheets that follow to each of the possible social housing typologies, both greenfield newbuilds and brownfield refurbishments and conversions. Where a capital letter “C” in bold red font appears next to a dot in the matrix, it indicates a conditional requirement which is further explained in the relevant sub-item on the sheet referred to

Table 2: Summary of overarching items and sub-items by level

Level	Overarching item	Sub-item	Greenfield or Infill Newbuilds		Refurbishment of existing residential	Adaptive Re-use / Conversion		Communal Housing As component of social housing development or as stand-alone building	
			Walk up no lifts	Mid to high rise towers – with lifts		Conversion of existing other residential	Conversion of existing non residential	Refurbishments and Conversions	New Build Projects
1. **Level 1: The external environment**	1.1. Overall context	1.1.1. Location of the project	●	●	●	●	●	●	●
		1.1.2. Urban Design & Strategic Area Frameworks	●	●	●	●	●	●	●
		1.1.3. Efficient use of land & resources: Building Typologies & Densities	●	●	●	●	●	●	●
		1.1.4. Bulk Services	● C	● C					●
		1.1.5. Environment & Ecology	● C	● C					●
		1.1.6. Mixed Use, Tenure and Income	●	●	●	●	●	●	●
		1.1.7. Heritage	●	●	●	●	●	●	●
		1.1.8. Entrance to development and perimeter treatment	●	●	●	●	●	●	●
	1.2. Accessibility	1.2.1. Vehicular and pedestrian movement through site	●	●					●
		1.2.2. Parking	●	●	●	●	●	●	●
	1.3. Overall building design in relation to site and context	1.3.1. Hierarchy of spaces and place making	●	●			●		●
		1.3.2. Architectural diversity and building massing	●	●			●		●
		1.3.3. Hard and soft landscaping	●	●	●	●	●	●	●
		1.3.4. Scale of project: Unit Numbers	●	●	●	●	●	●	●
2. **Level 2: The building**	2.1. Building design	2.1.1. Adaptability and building re-use			●	●	●	●	
		2.1.2. Orientation: Solar heat gain and shading	●	●					●
		2.1.3. Building entrances, thresholds and staircases	●	●	●	●	●	●	●
		2.1.4. Design of buildings: Cross ventilation	●	●		●	●	●	●
		2.1.5. Building envelope: Walls	●	●					●
		2.1.6. Building envelope: Windows and glazing	●	●					●
		2.1.7. Building envelope: Roof Construction / Insulation / Guttering / Waterproofing	●	●	●	●	●	●	●
	2.2. Services	2.2.1. Electrical, water, other	● C	● C	●	●	●	●	●
		2.2.2. Lighting	●	●	●	●	●	●	●
	2.3. Maintenance and management	2.3.1. Operations Manual	●	●	●	●	●	●	●
		2.3.2. Maintenance schedules	●	●	●	●	●	●	●
	2.4. Sustainability	2.4.1. Rainwater collection	●	●					●

Level	Overarching item	Sub-item	Greenfield or Infill Newbuilds		Refurbishment of existing residential	Adaptive Re-use / Conversion		Communal Housing As component of social housing development or as stand-alone building	
			Walk up no lifts	Mid to high rise towers – with lifts		Conversion of existing other residential	Conversion of existing non residential	Refurbishments and Conversions	New Build Projects
		2.4.2. Energy efficiency	●	●	●	●	●	●	●
3. Level 3: The Building: Common Areas	3.1. Common areas	3.1.1. Building entrance and Lobby	●	●	●	●	●	●	●
		3.1.2. Common Areas: Lift lobbies & Provision of Lifts	●	●	●	●	●	●	●
		3.1.3. Internal passages / External walkways	●	●	●	●	●	●	●
		3.1.4. Ratios	●	●	●	●	●	●	●
	3.2. Provision of amenities	3.2.1. Laundry areas	●	●	●	●	●	●	●
		3.2.2. Refuse areas	●	●	●	●	●	●	●
		3.2.3. Provision of open space	●	●					●
		3.2.4. Recreational and play areas	●	●	●	●	●	●	●
		3.2.5. Other amenities	●	●	●	●	●	●	●
	3.3. Services	3.3.1. Services reticulation	●	●	●	●	●	●	●
		3.3.2. Hot water provision	●	●	●	●	●	●	●
		3.3.3. Ventilation	●	●	●	●	●	●	●
		3.3.4. Fire equipment	●	●	●	●	●	●	●
		3.3.5. Safety and security: Monitoring: CCTV	●	●	●	●	●	●	●
	3.4. Maintenance and management	3.4.1. Material Specifications: Common Areas: Lobbies & Passages	●	●	●	●	●	●	●
	3.5. Accessibility	3.5.1. Access to units	●	●	●	●	●	●	●
	3.6. Sustainability	3.6.1. Lighting	●	●	●	●	●	●	●
4. Level 4: Unit design	4.1. Design: space norms and standards	4.1.1. Common Areas: Metering and sub metering	●	●	●	●	●	●	●
		4.1.2. Unit design	●	●	●	●	●	●	●
		4.1.3. Unit size	● C	● C	●	● C	● C	●	●
		4.1.4. Mix of unit types and sizes	●	●	●	●	●	●	●
		4.1.5. Shape	●	●			●	●	●
	4.2. Design of unit	4.2.1. Unit plans: space planning	●	●	●	●	●	●	●
		4.2.2. Entrance	●	●			●	●	●
		4.2.3. Kitchen area: space planning: self-contained unit	●	●	●	●	●	●	●
		4.2.4. Living room	●	●	●	●	●	●	●
		4.2.5. Bedroom (main)	●	●	●	●	●	●	●

Level	Overarching item	Sub-item	Greenfield or Infill Newbuilds		Refurbishment of existing residential	Adaptive Re-use / Conversion		Communal Housing As component of social housing development or as stand-alone building	
			Walk up no lifts	Mid to high rise towers – with lifts		Conversion of existing other residential	Conversion of existing non residential	Refurbishments and Conversions	New Build Projects
		4.2.6. Bedroom (second)	●	●	●	●	●	●	●
		4.2.7. Access to outdoor space and balconies	●	●					
	4.3. Materiality: specifications	4.3.1. Floors	●	●	●	●	●	●	●
		4.3.2. Walls: construction and finishes	●	●		●	●	●	●
		4.3.3. Ceilings	●	●		●	●	●	●
		4.3.4. Bathroom	●	●	●	●	●	●	●
		4.3.5. Kitchen fittings	●	●	●	●	●	●	●
		4.3.6. Materials: finishes	●	●	●	●	●	●	●
	4.4. Services	4.4.1. Ventilation	●	●		●	●	●	●
		4.4.2. TV/Satellite/IT/Fibre	●	●	●	●	●	●	●
	4.5. Maintenance and management	4.5.1. Building user/occupants guide	●	●	●	●	●	●	●
	4.6. Accessibility	4.6.1. Bathroom design	●	●	●	●	●	●	●
		4.6.2. Accessible kitchens	●	●	●	●	●	●	●
	4.7. Sustainability	4.7.1. Lighting internal to unit	●	●	●	●	●	●	●
		4.7.2. Water use	●	●	●	●	●	●	●
		4.7.3. Metering	●	●	●	●	●	●	●
		4.7.4. Use of sustainable materials	●	●	●	●	●	●	●
5. Norms & Standards for Communal Housing	5.1. Rooms with shared Amenities	5.1.1. Unit Design							●
	5.2 Common Amenities	5.2.1 Bathrooms							●
		5.2.2 Kitchens							●
		5.2.3 Common Area Amenities							●

3 Norms and Standards

The below sections provide detail on both overarching and sub-items of relevance to Norms and Standards of Social Housing.

3.1 Level 1: External environment

Overarching Item	1.1 Overall Context
Sub-Item	**1.1.1 Location of Project**
Principles	Social Housing should be well located within existing CBDs or urban nodes and within an approved urban edge.
Guidelines	Social Housing projects should be well located with easy access to existing economic and social infrastructure and in a manner that enables spatial and social transformation. In this regard: • Social housing should be located in established CBDs and urban nodes. • Social housing should not be located outside the urban edge of an urban area[2].
Norm and Standard	The following locational attributes to be demonstrated: • Access in close proximity (less than 500m) to established public transport routes and stops. • Within a 10 minute walk (+/- 800m radius) of site show location and access to at least 3 of the following : - Public Transport: bus, taxi, train etc [Mandatory] - Schools: Pre-school / Public Junior + Senior Schools - Established economic activities and employers such as office parks, industrial areas etc - Retail and convenience e.g. ATMs, Pay points for municipal accounts - Healthcare Facilities - Leisure & Recreational Facilities - Open Space • And/or access to affordable Public Transport: bus, taxi, train etc., that will take a person to all of the above within 15 minutes of travel time • In the case of a new build development within a newly developed area subject to an approved Urban Design Framework, show that key amenities such as schools, open space and recreational facilities are planned and will be developed within a finite timescale.

[2] An urban edge is defined as a line drawn around an urban area as a growth boundary i.e. the outer limit of urban areas. This urban edge marks the transition between rural and urban land use i.e. generally between urban areas serviced by municipal services to land uses predominantly agricultural, nature and conservation areas.

Conditional Requirement	• This Item is a Conditional Requirement for funding by the SHRA. • Project to be with Restructuring Zones as defined by the Social Housing Act (Act No 16 of 2008).
Required documentation for evidence	Locality plans and mapping showing site location, entrance to development and location of the amenities listed above.
Corresponding References	This sub-item should be read in conjunction with sub-items: 1.1.2 Urban Design Frameworks 1.1.4 Environment & Ecology
Practice Note Reference	None

Overarching Item	1.1 Overall Context
Sub-Item	**1.1.2 Urban Design & Strategic Area Frameworks**
Principles	The creation of viable integrated neighbourhoods is a key goal in spatial transformation. New social housing developments should contribute to neighbourhood formation through positive spatial integration in existing urban areas.
Guidelines	In addition to the brief for the development -which should provide guidance on proposed densities, mix of unit types and proposed tenant profile, an Urban Design Framework (UDF) may be in place for major new build developments which comprises of a larger land parcel. An urban design framework (UDF) refers to the pattern, structure or arrangement of streets, buildings and landscape that make up urban areas. The interrelationship between these elements and their individual characteristics come together to make a 'place' and ultimately a neighbourhood. In many instances specific city strategic area frameworks are in place which define the development vision of specific area and translate city scale policy frameworks into area specific frameworks. The mix of buildings, streetscape and open spaces are important to the quality of residential developments and neighbourhoods. A UDF creates a structure for the design of developments within an area and would take the following into consideration; movement frameworks, hierarchy of spatial development, density, diversity and mix of uses, public open space and landscape design.
Norm and Standard	The development must be compliant with the Strategic Area Frameworks and /or Urban Design Framework for the relevant area where applicable. Large scale (mega) developments comprising of a larger land parcels with +500 units must have an Urban Design Framework which illustrates how the project is broken up into sub-precincts with a diversity of building types and identities.
Required documentation for evidence	1. Copy of Urban Design Framework / Strategic Area Framework 2. Design Report from Urban Designer or Architect demonstrating compliance with Framework.
Corresponding References	This sub-item should be read in conjunction with sub-items: 1.1.1 Location of Project 1.2.1 Hierarchy of Spaces & Place making
Practice Note Reference	None

Overarching Item	1.1 Overall Context
Sub-Item	**1.1.3 Efficient use of land & resources: Building Typologies & Densities**
Principles	The development should contribute to efficient use of land, environment and services through appropriate building typologies and densities.
Guidelines	Urban sprawl threatens the efficient use of urban infrastructure. Urban consolidation is a principle that recognises designs that make use of compact development patterns to increase efficient land use utilisation. The redevelopment of previously used or unused sites contributes to city regeneration and stimulates economic and social investment in communities. This efficient use of land is directly correlated to the typologies of buildings. Therefore, densification through the use of brownfields and infill sites is encouraged. Developments on land that has not been previously promulgated for development and is outside of existing urban nodes or edge is discouraged. The building typology is a key factor in determining densities that contribute to efficient land utilisation.
Norm and Standard	The Building Typology to be used should be specified for example, 3-4 walk up / medium to high rise etc. The development should enable sufficient density in relation to the building typology and location. Where densities permitted in terms of existing town planning schemes/site zoning are considered inappropriate, an application and motivation for increased densities should be submitted, provided this is supported by local authority planning departments and will not unduly delay approvals.
Required documentation for evidence	Design report from Architect / Town Planner showing building typology and density calculations in relation to contextual benchmarks and Strategic Area Frameworks.
Corresponding References	This sub-item should be read in conjunction with sub-items: 1.1.1 Location of Project 1.1.2 Urban Design and Strategic Area Frameworks
Practice Note Reference	Practice Note to be developed on general suggested densities per contextual conditions.

Overarching Item	1.1 Overall Context
Sub-Item	**1.1.4 Bulk Services**
Principles	New developments should be in areas where sufficient bulk capacity already exists, or where not, aligned with short to medium-term municipal infrastructure and spatial development strategies, plans and capital budgets.
Guidelines	None
Norms & Standards	Development should not proceed unless there is adequate capacity of bulk services to ensure a continued and ongoing supply.
Conditional Requirements	Existing capacity available to meet the demands of the project, or firm commitments that such capacity will be available in time for the project to be habitable on completion.
Required documentation for evidence	1. Engineering Services Reports 2. Information from Local Authority
Corresponding References	This sub-item should be read in conjunction with sub-item: 1.1.5 Environment & Ecology
Practice Note Reference	None

Overarching Item	1.1 Overall Context
Sub-Item	**1.1.5 Environment & Ecology**
Principles	Reduce impact of greenfields development on ecological systems and biodiversity.
Guidelines	The development should not be located on prime agricultural land or land that has a high ecological value / has evidence of threatened species or within the buffer zones of watercourses or ridges Developments should be located within established urban boundaries and aligned to City and Metro Spatial Development Frameworks.
Norm and Standard	The development should be aligned with the relevant Spatial development Frameworks. Development should not be on land that has high ecological value – this includes land used for agricultural production, as well as land currently designated and used as open space or parkland
Conditional Requirement	No development on land that is still zoned as agricultural land and where Bulk Services are not available
Required documentation for evidence	1. Confirmation of project location in relation to Spatial Development Frameworks. 2. Evidence of compliance with municipal by-law and national legislation related to built environment environmental considerations such as confirmation that an Environmental Impact Assessment (EIA) is not required, or when required has achieved a positive Record of Decision (ROD). 3. Submit copy of EIA and Environmental Authorisation (RoD) if required in terms of Statutory Compliance
Corresponding References	This sub-item should be read in conjunction with sub-items: 1.1.1 Location of Project 1.1.2 Urban Design & Strategic Area Frameworks 1.1.4 Bulk Services 1.1.7 Heritage
Practice Note Reference	None

Overarching Item	1.1 Overall Context
Sub-Item	**1.1.6 Mixed Use, Tenure and Income**
Principles	To encourage mixed use housing developments that promote economic and neighbourhood sustainability
Guidelines	Mixed use developments that incorporate uses other than housing such as retail, working spaces and community facilities such as crèches contribute to the economic and social sustainability of the development. Lettable retail and working spaces can contribute to cross subsiding the operational income stream of the development. Saleable for profit options such as sectional title, FLISP and open market units can contribute cross subsidies to capex through profit sharing. Mixed income residential development also promote social diversity and integration, greater sustainability and avoids large ghetto-like concentrations of low income rentals Community Facilities such as crèches that can be used by both residents and the broader community engage the development into a neighbourhood amenity.
Norm and Standard	Dependent on location, feasibility and typology a percentage of the development should be allocated for uses other than social housing.
Required documentation for evidence	1. Plans showing areas allocated for mixed use. 2. Inclusion of rental returns from other uses into feasibility model.
Corresponding References	This sub-item should be read in conjunction with sub-item: 1.1.2 Urban Design and Strategic Area Frameworks
Practice Note Reference	None

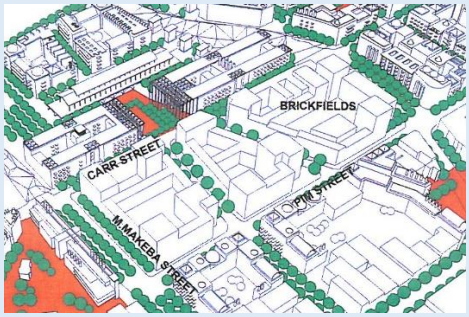
Overarching Item	1.1 Overall Context
Sub-Item	**1.1.7 Heritage**
Principles	The conservation and protection of our cultural heritage is recognised in terms of our cultural identity.
Guidelines	Heritage may be identified in terms of the **value** and **age** of the built environment but it also may be in terms of the **social history** of the site and archaeological value. No person may alter or demolish any structure or part of a structure which is older than 60 years without a permit issued by the relevant provincial heritage resources authority. This is relevant to developments on brownfields sites even when currently vacant and within existing buildings. However, heritage does not only apply to the built environment; a development may be subject to an impact assessment, specifically in cases where the development or other activity which will change the character of a site exceeding 5 000 m2 in extent; or involving the consolidation of three or more existing erven.
Norm and Standard	Development should be compliant with heritage requirements where relevant.
Required documentation for evidence	1. Demonstrate compliance with the National Heritages Resources Act of 1999 and any relevant municipal by-laws. 2. Heritage Report 3. Heritage Impact Assessment 4. Permits
Corresponding References	This sub-item should be read in conjunction with sub-item: 1.1.5 Environment & Ecology
Practice Note Reference	None

Overarching Item	1.1 Overall Context
Sub-Item	**1.1.7 Entrance to Development and Perimeter Treatment**
Principles	The perimeter treatment of the development is an important factor in the integration of the development within the existing urban fabric. Safety & security of both residents and the neighbourhood are affected by the perimeter treatment of developments.
Guidelines	To provide a secure perimeter design to development that supports street surveillance and active monitoring of grounds. The development should have clearly defined entrance with separate vehicular and pedestrian access. Design should ensure a primary point of access control. In large scale developments, consideration should be given to taxi pickup and drop off zones adjacent to entrances.
Norm and Standard	Secure perimeter and entrance/s to development with a gatehouse in case of estates, and with access control / facilities for guards for both estates and buildings. Points of site ingress/egress should be designed to ensure smooth and efficient flow of both pedestrian and vehicular traffic for both residents and visitors, especially at peak times
Required documentation for evidence	1. Site Plan / Site Development Plan showing: 2. Location of buildings in relation to site and the “built edge’ condition 3. Location of entrance to development or building 4. Correlation to location of transportation links as stipulated in sub-item 1.1.1
Corresponding References	This sub-item should be read in conjunction with sub-item: 1.1.2 Urban Design and Strategic Area Frameworks
Practice Note Reference	None

Overarching Item	1.2 Accessibility
Sub-Item	**1.2.1 Vehicular and pedestrian movement through the site**
Principles	Provide a safe environment for residents and ground floor accessibility for all residents.
Guidelines	Vehicular and pedestrian movement should enable ease of movement and a safe environment for residents. Vehicular traffic to be separated from pedestrian traffic as far as possible. Speedbumps should be provided to slow traffic down Parking areas to be clearly be delineated from landscaped open areas. Paved or surfaced paths to be provided to facilitate movement through the development between buildings.
Norm and Standard	The entire ground floor of the development should be accessible for wheelchairs and push chairs through the use of mountable kerbs and ramps. Walkways to be adequately sized in terms of width. The surface finish should be slip resistant, easily cleanable and have longevity.
Required documentation for evidence	1. Site Plan showing location of parking and pedestrian paths through development
Corresponding References	This sub-item should be read in conjunction with sub-item: 1.2.2 Parking
Practice Note Reference	None

Overarching Item	1.2 Accessibility
Sub-Item	**1.2.2 Provision of Parking**
Principles	Adequate suitably located parking to be provided on site for residents and visitors. There should be parking that is appropriate for disabled residents and visitors
Guidelines	Determine appropriate parking ratios required in relation to context, locality, access to reliable and affordable public transport, and apply to municipality to have these reduced if necessary, where the reduction is supported by the planning and roads departments and will not unduly delay approvals for the project. In existing buildings or inner city building conversions with limited or no parking – no additional parking would be required
Norm and Standard	Parking areas must be compliant with minimum required or maximum allowed parking ratios. The Parking Ratio for new build projects should not exceed 0.5 bays / unit unless specifically motivated in terms of specific local policy requirements. Provision should be made of adequately sized parking bays for disabled residents and visitors in close proximity to building entrances.
Required documentation for evidence	1. Site Plan 2. Town Planning Compliance Tables: Parking ratios
Corresponding References	This sub-item should be read in conjunction with sub-item: 1.2.2 Vehicular & pedestrian movement through site.
Practice Note Reference	None

Overarching Item	1.3 Overall Building design in relation to site & context
Sub-Item	**1.3.1 Hierarchy of Spaces & Place making**
Principles	The design of building types, the relationships between them, their relationships to streets and the spaces created around them will influence the character of the overall site and its surroundings and contribute to the quality and identity of the new environment.
Guidelines	In preparing overall scheme layouts, consideration should be given to the following factors: • Integration of the development into the existing context through respecting existing street patterns, landscape and urban markers. • Siting of buildings to take into account relationship to street edge, building scale and size, and orientation. • Creating identity of place through design of spaces between buildings • Encouraging 'social living' The layout design should aim to create an identity of place which helps foster residents' sense of 'ownership' and responsibility for the development thereby contributing to the creation of a sustainable community. Example:  The design on the left utilises a standard block design which is repeated across the site. On the right the same development is redesigned to a more efficient layout achieving a higher density and creating a stronger relationship of units to a street based landscape. Reference : NASHO: Framework for improving the design of Social Housing projects
Norms & Standards	The layout should engender a sense of place and community through spatial differentiation within the development
Required documentation for evidence	Site Plan demonstrating within the design layouts of the buildings, spatial differentiation between open spaces, garden areas, parking areas allowing privacy as well as surveillance of public spaces.
Corresponding References	This sub-item should be read in conjunction with sub-items: 1.1.2 Urban Design and Strategic Area Frameworks 1.1.3 Efficient use of land & resources
Practice Note Reference	Practice note on "place-making" to be developed.

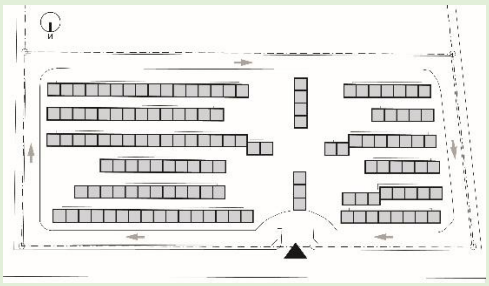
Overarching Item	1.3 Overall Building design in relation to site & context
Sub-Item	**1.3.2 Architectural Diversity & Building Massing**
Principles	The design of building types, the relationships between them influences the character of the overall site and its surroundings and contributes to the quality and identity of the new environment.
Guidelines	In preparing overall scheme layouts consideration should be given to the following factors: • Siting of buildings to take into account relationship to street edge, building scale and size, and orientation. • Creating identity of place through design of spaces between buildings • Avoiding monotony associated with developments with a single repetitive building type or a singular wall surface treatment. Consideration to be given to external wall treatment in terms of diversity of surface treatments and elevational design. • Consideration to be given to varying heights of buildings and marking key elements such as entrances and corners. Consider to what extent ground floor units, top floor units and units at the ends of building blocks could be differentiated from the more typical floors, or amongst the units in the middle of building? To what extent have these special opportunities should be harnessed in order to create diversity and interest and in order to overcome the monotony ordinarily associated with mass housing? Example: Massing Diagram from Newtown North Urban Design Framework: Brickfields Social Housing 2004: GAPP Architects 
Norms & Standards	The development's architecture should be diverse including different building types, heights and facade treatments. Developments must demonstrate a diversity of building type that is responsive to site conditions in line with the Urban Design Framework.
Required documentation for evidence	Design Report by Architect with plans, sections, elevations and massing models demonstrating how the norm & standard is achieved.
Corresponding References	This sub-item should be read in conjunction with sub-items: 1.1.2 Urban Design and Strategic Area Frameworks 1.2.1 Hierarchy of spaces and placemaking

Practice Note Reference	None
Overarching Item	**1.3 Overall Building design in relation to site & context**
Sub-Item	**1.3.3 Hard and soft Landscaping**
Principles	Landscaping and open space contribute to the health and wellbeing of residents whilst also contributing to climate resilience.
Guidelines	In greenfields and brownfields developments: Example of sufficiency : Landscaping could include: • Soft Landscaping: Trees, grassed and planted areas. • Urban Agriculture such as planting for Food Gardens • Hard Landscaping: Paving and permeable paving. All planting must be considered in terms of indigenous and water wise plants Seating and other amenities such as playgrounds must be correlated to the landscape plan in terms of shading. All surfacing must be considered in terms of permeability for stormwater attenuation and soak away and possible water collection in terms of climate resilience Play area surfacing must comply with relevant fall safety standards. Playgrounds should comply with SANS51176 : Playground Equipment & Surfacing The maintenance of all landscaped areas must be considered in terms of maintenance, water use etc. In existing buildings which do not have open space consideration could be given to planting in limited planting in containers in suitable areas which have sufficient sun. This could also for instance include rooftop and/or courtyard food gardens
Norms & Standards	Landscaping should be provided depending on the size and type of development and erf, as well as the surrounding area.
Required documentation for evidence	1. Site Plan showing areas of soft and hard landscaping. 2. Specifications of surfacing etc shown in specification documentation.
Corresponding References	This sub-item should be read in conjunction with sub-items: 3.2.3 Provision of Open Space.
Practice Note Reference	None

Overarching Item	1.3 Overall Building design in relation to site & context
Sub-Item	**1.3.4 Scale of Project: Unit Numbers**
Principles	The objective of this item is to demonstrate operational scale and the correlation between unit numbers and amenities provided.
Guidelines	Whilst the size of the project is based on the size of the erf and market demand, the number of units should be at a scale that enables the development to operate effectively.
Norms & Standards	Unit numbers must be appropriate for the size of the erf and market demand taking into consideration unit size
Required documentation for evidence	1. Provide breakdown of overall unit numbers & unit typologies. 2. Overall population density based on unit typologies. The above should be cross referenced to amenities provided on site as a percentage against unit area or list amenities against unit numbers or area of open space (excluding parking) as a ratio to occupancy numbers.
Corresponding References	This sub-item should be read in conjunction with sub-item: 4.1.3 Mix of unit types and sizes.
Practice Note Reference	None

3.2 Level 2: The Building

Overarching Item	2.1 Building Design
Sub-Item	**2.1.1 Adaptability and Building re-use**
Principles	The re-use and adaptation of existing building stock for housing is an effective strategy for optimising unused or under-utilised assets within cities.
Guidelines	Adaptive re-use refers to the process of reusing an existing building for a purpose other than which it was originally built or designed for. As construction waste accounts for approximately 30% of all waste generated which ultimately goes into landfill, re-using existing buildings minimises material consumption and is beneficial to the environment. A building will need to be assessed for its potential to be re-used for housing in terms of: The condition of the building The floorplate configuration and its suitability for a residential configuration The position of circulation cores: lifts and staircases The façade of the building, its window configuration or façade make up The construction of the building: its load bearing capacity and floor slab construction. For example, can areas of the slab be cut out if required The Existing Rights: can the building be added to in terms of its area (additions) or FAR (building height)? Existing older residential building stock should also be considered within similar evaluation parameters. Many older buildings require complete replacement of building services and refurbishment of the units. In some cases, the unit sizes may be incompatible with current requirements and may need to be resized. This could mean combining 2 units into a single unit or breaking larger units into smaller units.
Norms & Standards	Every building conversion will have slightly different parameters and will be assessed on its own merits according to the viability of the project and compliance with unit space norms and standards and unit mixes.
Required documentation for evidence	1. Pre-feasibility assessments incorporating indicative analyses of contextual factors and risks such as market and urban development trends, socio-economic issues, cost estimates and financial viability. 2. Building Condition Reports describing the condition of the existing building, structural integrity, the existing and available development rights, the condition of services by Architect and Engineering Team.
Corresponding References	This sub-item should be read in conjunction with sub-item: 1.1.6 Heritage
Practice Note Reference	None

Overarching Item	2.1 Building Design
Sub-Item	**2.1.2 Orientation: Solar Heat Gain & Shading**
Principles	To optimise resident thermal comfort levels within buildings. Thermal comfort is a means of describing occupant comfort levels which take into account a series of factors such as air temperature, radiant temperature, humidity, draughts, clothing value and activity rates.
Guidelines	Appropriate orientation of buildings optimises sun penetration, solar heat gain and shading. The majority of buildings should face north (where other weather or topography conditions do not supercede the solar gain). It is noted that this may not be possible in a perimeter block development and that elevations that are not optimally orientated should be provided with adequate shading devices. The optimum orientation needs to be balanced against other factors such as topography and place making.  Example: This development on a flat site places all the units in rows facing north achieving good orientation. However, the placement of units in relation to the site, street edge, landscaping etc does not show any elements of placemaking. This would not be a good example of the balance between orientation and overall design.
Norms & Standards	The majority of buildings should face north, or at least within 15 degrees west or east of north. With perimeter block developments at least 50% of all facades should face north, or at least within 15 degrees of west or east of north It is noted that within developments not all elevations can be optimally orientated. Elevations that are subject to solar heat gain e.g. West facing should be provided with adequate shading devices and/or solar control glass as per the glazing rationale
Required documentation for evidence	1. Site Layouts showing all buildings and amenities with orientation clearly denoted.
Corresponding References	This sub-item should be read in conjunction with sub-items: 1.2.1 Hierarchy of spaces and placemaking
Practice Note Reference	Practice Note on solar orientation to be developed.

Overarching Item	2.1 Building Design
Sub-Item	**2.1.3 Building Entrances, Thresholds and Staircases**
Principles	The design, location and materiality of entrances to individual buildings and location of staircases is key to accessibility, legibility, safety and the creation of community networks within developments and buildings.
Guidelines	Building Entrances should be designed so that a limited group of units share an entrance or staircase. There must be a clear distinction between public, semi-private and private space and a strong sense of security for everybody who will use the area. Consideration should be given to planning for safety and security of residents in terms of the design. Staircases should have a roof covering where possible on low rise walk-ups and definitely on high rise buildings. This is not only to provide protection from the environment but also to assist with cleaning, maintenance and safety.
Norms & Standards	Thresholds to entrances to buildings and entrance doors should be provided with paved areas and covers to doors where possible. Buildings must be accessible to persons with disabilities with step free or ramped access. Thresholds and Staircases should conform to disability requirements in relation to changes of texture, tactile indicators etc. Entrance areas and staircases should be well lit. Access control may not necessarily be required at individual buildings within multi-unit larger developments with a single gated entrance.
Required documentation for evidence	1. Project design documentation (Site Plan / Building Plans)
Corresponding References	This sub-item should be read in conjunction with sub-items: 3.1.1 Building Entrance & Lobby 3.1.2 Lift Lobbies
Practice Note Reference	None

Overarching Item	2.1 Building Design
Sub-Item	**2.1.4 Design of Buildings: Cross Ventilation**
Principles	To encourage designs that provide ample amounts of fresh air to reduce indoor temperatures and counteract the build-up of indoor pollutants and moisture build up.
Guidelines	In new build developments the design of buildings should maximise opportunities of dual aspects and cross ventilation for habitable rooms. The depth of space that can be ventilated using a cross-flow ventilation strategy is dependent on the floor to ceiling height and the number and location of the openings. The preferred typology in this respect is a single loaded passage typology which enables passive ventilation and cross ventilation. In the conversion of other building types to residential use, where a double loaded passage typology is used, consideration must be given to ventilation of passages by passive or mechanical means. **Table 27:** Types of natural ventilation **Type** / **Image** / **Description** **Single-sided Ventilation**  Single-sided ventilation relies on the pressure differences between different openings within a single space. It is more predictable and effective than if there is only a single opening, and can therefore be used for spaces with greater depth. For spaces that only have a single opening the ventilation is driven by turbulence. This turbulence creates a pumping action on the single opening, causing small inflows and outflows. As this is a less predictable method, the room depth for single opening, single-sided ventilation is reduced. **Cross-ventilation - Single Spaces**  Cross ventilation of single spaces is the simplest and most effective approach. Cross-ventilation is driven by pressure differences between the windward and leeward sides of the space. **Cross-ventilation - Double-Banked Spaces**  Cross-ventilation with banked rooms can be achieved by creating openings in the corridor partition. It is only acceptable where a room has ownership of both windward and leeward sides of the building, as the ventilation of the leeward space relies on the occupant of the windward space. The openings also provide a route for noise to travel between spaces. Reference : https://www.edgebuildings.com/wp-content/uploads/2018/12/EDGE-User-Guide-for-All-Building-Types-Version-2.1-Release-B.pdf
Norms & Standards	All buildings – units should be passively ventilated. Common areas should be adequately ventilated by passive or mechanical ventilation Buildings should have adequate airflow and be cross ventilated wherever possible
Required documentation for evidence	1. Building Design Documentation: Plans and Sections

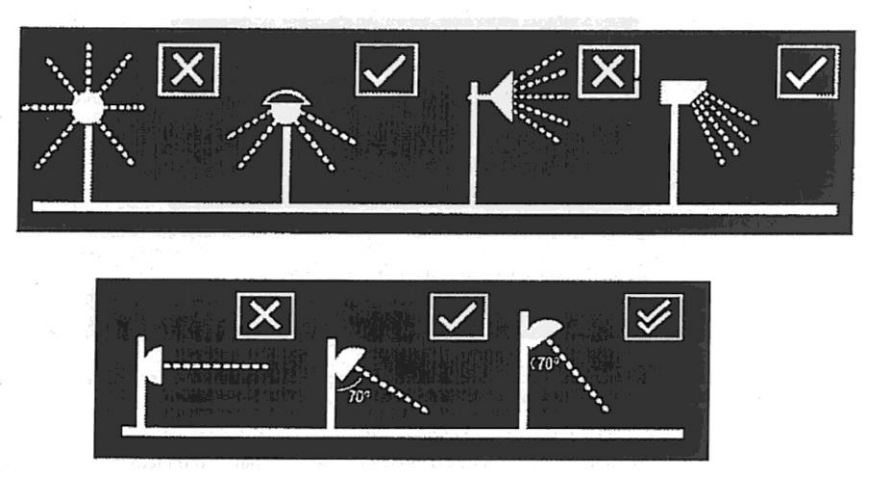
Corresponding References	This sub-item should be read in conjunction with sub-item: 4.4.1 Natural Ventilation which describes the ventilation requirements at the unit level
Practice Note Reference	None

Overarching Item	2.1 Building Design
Sub-Item	**2.1.5 Building Envelope: Walls**
Principles	The external materiality of a building needs to balance environmental considerations, durability and aesthetics.
Guidelines	Environmental: the external envelope: wall construction must be of suitable material that is compliant in terms of SANS10400. Materiality: the materiality of the building must be considered in terms of durability and long term maintenance. Aesthetics: the elevations of large scale housing buildings can be repetitive and require design thought as to creating individuality and interest in a housing development. For example in relation to the use of conventional materials exterior of buildings could be mix of face brick and plaster + painted areas. Plastered areas should be located in areas where they are accessible for future maintenance. The materials and building systems considered could be conventional such as brick, concrete etc or non/un-conventional.
Norms & Standards	External building materiality must comply with SANS10400XA: Wall and Roof. Where non/un-conventional materials or building systems are selected the performance of these must be demonstrated in terms of the required Test Reports & Certification (such as agrement certification) as per SANS 10400 Part A. Building materiality should take into account longevity of materials and maintenance.
Required documentation for evidence	1. Building Design Documentation: Elevations 2. Specification Document 3. Design Report 4. Materials Specifications with specific reference to durability & maintenance plans and any Test Reports or Certifications if required 5. Maintenance Plans 6. Compliance in terms of SAN10400XA
Corresponding References	This sub-item should be read in conjunction with sub-item: 1.3.2 Architectural diversity and building massing.
Practice Note Reference	None

Overarching Item	2.1 Building Design
Sub-Item	**2.1.6 Building Envelope : Windows & Glazing**
Principles	Adequate specification of windows in terms of their frames and glazing contributes to good thermal comfort within units.
Guidelines	In new build projects, windows & glazing must comply with SANS 10400XA. However this does not necessarily mean an expensive solution which could be over specified in terms of performance glazing. A balance must be found between adequate window sizes for achieving thermal comfort for occupants in terms of good light and ventilation and the requirements of SANS10400 Part XA in terms of solar heat gain and heat loss. A glazing rationale or modelling regarding the requirements for glazing in relation to orientation and shading of facades can result in a nuanced solution to the specification of windows and glazing. In existing buildings and conversions where windows and glazing are existing, the glazing rationale needs to be justified in terms of existing building conditions and other factors such as heritage, as the replacement of façade glazing could be a prohibitive cost centre. Safety of children is to be considered in relation to opening windows and heights of openings with the provision of safety bars.
Norms & Standards	Window frames and glazing should comply with SANS 10400XA with as simple a solution to glazing as possible.
Required documentation for evidence	1. Building Design Documentation 2. Window Glazing Rationale: Describe glazing rational in terms of window frames and glazing specified (not necessarily glazing calcs). 3. Specification Document
Corresponding References	This sub-item should be read in conjunction with sub-item: 4.4.1 Natural Ventilation
Practice Note Reference	None

Overarching Item	2.1 Building Design
Sub-Item	**2.1.7 Building Envelope : Roof Construction / Insulation / Guttering / Waterproofing**
Principles	The roof of the building is an important element in relation to managing thermal comfort through insulation as well as weather protection and rainwater run-off.
Guidelines	The roof construction may vary in different building types from pitch roofs to flat roofs on higher rise buildings. On new build projects with pitched roofs, guttering should be provided. The purpose of providing guttering is to direct stormwater run-off from roofs away from buildings where damage to facades and foundations can occur. Guttering and downpipes also allow for rain water collection that can be used for garden irrigation and possible greywater use in some instances. Flat roofs must be considered in relation to the design of stormwater removal, insulation and waterproofing. If the roof is a trafficable area, the waterproofing must be guaranteed for this purpose. The use of concrete waterproofing admixtures could be considered which have no maintenance and longer guarantee periods. In existing buildings, the roof waterproofing must be evaluated and serviced or replaced as required. The specification of waterproofing must be evaluated in terms of the guarantee offered and the maintenance required by the SHI for the guarantee to be validated. Consideration should be given to the length of guarantee that will be given with no maintenance requirements. For example; 5 year guarantee with no maintenance required 10 year guarantee may require a service every 2 years
Norms & Standards	Roof material: covering and insulation to comply with regulations and be adequately specified in terms of lifecycle costing and aesthetic considerations. Evidence of rainwater and stormwater management such as gutters and paved splashbacks around buildings to manage stormwater run-off into retention areas and soak aways.
Required documentation for evidence	1. Building Design Documentation 2. Specification Document
Corresponding References	This sub-item should be read in conjunction with sub-item: 2.5.1 Rainwater collection
Practice Note Reference	None

Overarching Item	2.2 Services
Sub-Item	**2.2.1 Electrical / water / other**
Principles	Adequate services (water, sanitation, electricity) available within existing area or building. Adequate capacity available to take additional demand.
Guidelines	Within the locational specifications of the social housing policy it is generally assumed that conventional approaches to services will apply to developments. However within the broader parameters of environmental sustainability and resilience, non/un-conventional approaches to service provision may be considered wholly or partially. These could be at a macro level for example applying localised black or grey water treatment. Or at a micro level such as off grid solutions provided to elements within a development for example dry /waterless toilets in certain building types like a guardhouse or community facility.
Norms & Standards	Services including water, sanitation and electricity should be provided on an affordable and ongoing basis.
Conditional Requirement	Existing capacity must be available
Required documentation for evidence	1. Project Inception Report : 2. Engineering Services Reports 3. Information from Local Authority and /or Engineering Consultants : location and availability of services, positions of tie-ins to municipal connections 4. Building services rationale: services to be provided 5. Where non/un-conventional materials or building systems are selected the location and specification of these must be provided. 6. In the case of existing buildings: Building Condition Report in relation to availability and condition of existing services
Corresponding References	This sub-item should be read in conjunction with sub-item: 2.2.1 Bulk Services and 3.3.1 Services Reticulation
Practice Note Reference	None

Overarching Item	2.2 Services
Sub-Item	**2.2.2 Lighting**
Principles	To ensure adequate lighting at a site level to ensure safety and security whilst minimising light pollution and light overspill in to units.
Guidelines	Public areas and walkways between buildings to be lit. Provide timers and / or sensors on appropriate light fixtures. Light fitting choice to reduce light pollution into sky and into units.  Illustrations of acceptable and unacceptable external lighting (Institute of Lighting Engineers : Green Star SA Multi Use Residential Tool V1 2011)
Norms & Standards	All units and common areas must be sufficiently lit to ensure safety and security of residents in a manner that is affordable in respect of the ongoing sustainability of the development.
Required documentation for evidence	None
Corresponding References	This sub-item should be read in conjunction with sub-item: 1.2.1 Vehicular & pedestrian movement through site and items relating to common areas.
Practice Note Reference	None

Overarching Item	2.3 Maintenance and management
Sub-Item	**2.3.1 Operations Manual**
Principles	Operations Manuals are key to providing information of maintenance, guarantees and service information to building management and should be in place for each development.
Guidelines	These manuals should contain all the as built documentation, information on finishes and technical service information that are required to maintain the buildings. Provide service manuals, integrated operations manuals for all services. Provide service manuals, integrated operations manuals for all materials with guarantees, cleaning directions etc.
Norms & Standards	Specify within professional service agreements and construction contracts the requirements for Operations Manuals and the handover of all Warranties / Guarantees.
Required documentation for evidence	This is a guideline for project completion
Corresponding References	This sub-item should be read in conjunction with sub-item: 2.3.2 Maintenance Schedules 4.5.1 Building User / Occupant Guide
Practice Note Reference	Practice Note on Operations Manuals should be provided.

Overarching Item	2.3 Maintenance and management
Sub-Item	**2.3.2 Maintenance schedules**
Principles	A maintenance schedule should be provided within the Operations Manual. This summarises all the key information on servicing and maintaining elements and equipment within the building.
Guidelines	Provide maintenance schedules for ad hoc, annual, 5, 10, 20 years cycles. Service Periods for all plant and services must be specified upfront in the tender documentation with specific attention paid to the alignment of Practical Completion Dates and the Start dates of Warranty Periods. In some cases, warranties can be voided if the required maintenance is not done by the owner with specified periods.
Norms & Standards	None for Social Housing but Sectional Title schemes are required to have a 10 year maintenance plan for major capital items.
Required documentation for evidence	This is a guideline for project completion Provide Schedules related to Building materials and services in terms of required scheduled maintenance.
Corresponding References	This sub-item should be read in conjunction with sub-item: 2.3.1 Operations Manuals
Practice Note Reference	Practice Note on maintenance planning to be developed.

Overarching Item	2.4 Sustainability
Sub-Item	**2.4.1 Rainwater Collection**
Principles	Rainwater collection should be considered in order to reduce the use of potable water for garden watering / car washing etc. In water stressed areas the collection of rain water is a critical part of ensuring building resilience.
Guidelines	In new build projects, consideration should be given to rainwater discharge and rainwater collection. The location of rainwater collection tanks should be considered in relation to the usage of the water. For example, a rainwater tank located adjacent to an entrance gatehouse could be used locally around the building and could possibly be used for greywater toilet flushing to the building at very little capital cost in relation to the savings in water usage. Rainwater collection tanks should be fitted with lockable taps and clear visual warnings (words and images) that the water is not safe for human consumption Where possible such systems should be fitted with leaf catchers and first flush diverters to minimise ingress of organic material, dust and run-off pollutants into the tanks
Norms & Standards	None
Required documentation for evidence	None
Corresponding References	This sub-item should be read in conjunction with sub-item: 2.1.7 Roofs & Guttering
Practice Note Reference	None

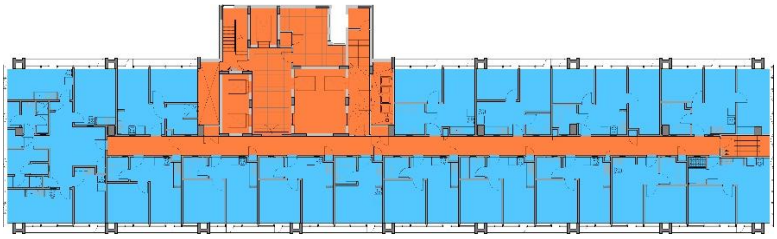
Overarching Item	2.4 Sustainability
Sub-Item	**2.4.2 Energy Efficiency**
Principles	To promote energy efficient designs that reduce overall energy consumption in social housing developments.
Guidelines	Describe any specific environmental and energy efficiency elements related to: The Building envelope: wall thermal resistance / thermal mass and roof insulation, Heating & Cooling systems if any, Services such as Hot Water, Lighting New developments should aim to achieve a 20% reduction in projected operational energy consumption as compared to typical local practices.
Norms & Standards	None
Required documentation for evidence	1. Building Design Documentation 2. Specifications 3. Technical Data Sheets
Corresponding References	This sub-item should be read in conjunction with sub-items related to lighting and 3.3.2 Hot Water provision.
Practice Note Reference	None

3.3 Level 3: The Building: Common Areas

Overarching Item	3.1 Building Design
Sub-Item	**3.1.1 Building Entrance & Lobby**
Principles	The building entrance is the first impression a visitor or resident gets of the building. The emphasis is on a friendly, welcoming feel, and this can be conveyed through careful consideration of materials, finishes, design and layout. Light, colour and openness are important. The safety and security of residents in building entrances is of paramount importance.
Guidelines	The building entrance must accommodate access control turnstiles and escape gate. The access control barriers must provide security but must also allow easy furniture moving and disabled access. Security should manage building entrances including for example: Access Control (e.g. Biometric), CCTV, Security Guard. Adequate facilities should be provided for staff including a designated toilet / change room with locker and area for making refreshments during his/her shift. Building Directional Signage: The entrance lobby should have information signage for residents that is neatly displayed and incorporated into the design of the entrance area.
Norms & Standards	The building entrance should be welcoming and have sufficient security to ensure that access to the building is controlled.
Required documentation for evidence	None
Corresponding References	This sub-item should be read in conjunction with sub-item: 3.2.4 Common Area Ratios
Practice Note Reference	None

Overarching Item	3.1 Building Design
Sub-Item	**3.1.2 Common Areas : Lift Lobbies & Provision of Lifts**
Principles	Common areas are defined as any structure or areas that lies outside of the individual space of the unit. These are managed by the SHI / managing entity. The quality of these spaces and the management of the services and cleaning of these areas is important in maintaining a quality environment that is safe and secure for all residents.
Guidelines	Adequate lifts must be provided calculated on the number of residents and the average trip cycle. Lift lobbies should be: Well lit, ventilated and have clear and legible signage. Lifts must have hard wearing floor and wall surfaces and must be able to be protected when used for furniture moving.
Norms & Standards	Where lifts are provided or are required to be provided in multi storey buildings (new build and retrofit), a minimum of 2 lifts to be provided unless only 1 shaft is available or specifically motivated otherwise in terms of a rational design by a lift consultant or relevant engineering professional.
Required documentation for evidence	None
Corresponding References	This sub-item should be read in conjunction with sub-item: 3.2.4 Common Area Ratios
Practice Note Reference	None

Overarching Item	3.1 Building Design
Sub-Item	**3.1.3 Internal Passages / External Walkways**
Principles	Common areas are defined as any structure or areas that lies outside of the individual space of the unit. These are managed by the SHI / managing entity. The quality of these spaces and the management of the services and cleaning of these areas is important in maintaining a quality environment that is safe and secure for all residents
Guidelines	Internal passages in buildings can become spaces of conflict if not designed and managed well. Consideration should be given to the design of internal passages in relation to the placement of doors, lighting and signage. The width of passages in should be a have a width range between 1000 and 1500 with allowances for wheelchair turning areas at some points along the length of a passage. The passage width will vary in relation to the building typology. For example a new build walk up with a single loaded access gallery may be 1000 wide, but a double loaded passage in a building conversion should be a minimum of 1200. It is noted that where facilities are provided for persons with disabilities the minimum passage width is 1500. Techniques that can be considered in relation to providing visual relief and breaking up long areas of wall are indenting doors, introducing areas colour. External walkways need to be considered as safe circulation spaces and as shared social spaces. Design aspects to be taken into account are adequate walkway widths, limiting the length of walkways, durable finishes, balustrade design.
Norms & Standards	Compliance with Part T of SANS10400 with design aspects to be taken into account: adequate passage / walkway widths in relation to building typology, limiting the length of passages /walkways, durable finishes, balustrade design.
Required documentation for evidence	Building Plans / Elevations
Corresponding References	This sub-item should be read in conjunction with sub-item: 3.2.4 Common Area Ratios
Practice Note Reference	None

Overarching Item	3.1 Building Design
Sub-Item	**3.1.4 Common Area Ratios**
Principles	Efficient common area to unit area utilisation
Guidelines	A balance is required between common area space and space dedicated to units. Developments should consider common area space in terms of the allocation and sizing of passage and circulation spaces and the adequate provision of common area amenities. Note that the efficiency of common area ratios within buildings needs to be correlated to the efficiency of the open space walkway network between buildings. Achieving efficient common areas in buildings only does not mean that the overall development will be efficient. This is particular relevant to developments with repeated blocks which multiply circulation cores.
Norms & Standards	The net common area for circulation and other common uses to gross unit area benchmark targets to be applied are : • Low rise walk-up : Average 20 % • Mid / High Rise : Average Range 25 - 30% In new build projects : The target should be as close to 15 - 20% as possible. However, this may increase in relation to the number of social amenities that are provided within buildings themselves such as laundry spaces and common rooms. Mid & High Rise buildings have more requirements for lift/ lobby and service areas. Ratios at the higher end should be substantiated in relation to this and must be factored in the project viability  Example : Walk up Block : Ratio 18 - 20% dependent on number of units sharing staircase In adaptive re-use / building conversions : In these buildings the existing cores may contain areas such as toilets that can be used as communal spaces and multiple lifts some of which may not be re-commissioned. In these cases the ratio may even exceed 25%.  Example: Office conversion of 12m wide building results in efficient unit layout but a large circulation core with multiple lifts and toilets results in a large common

	space ration of 30% - this is offset against the provision of community amenities within these redundant spaces. ©Savage + Dodd Architects
Required documentation for evidence	Building Design Documentation Area Tables
Corresponding References	This sub-item should be read in conjunction with sub-items: 3.1.2 Common Areas: Lift Lobbies & Provision of Lifts 3.2.3 Passages & Walkways
Practice Note Reference	None

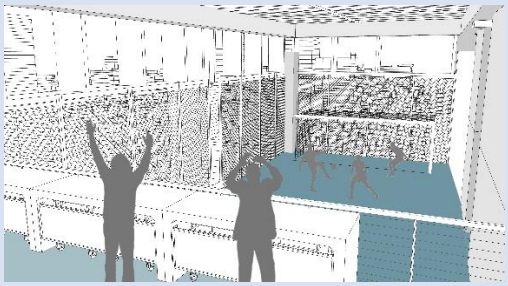
Overarching Item	3.2 Provision of Amenities
Sub-Item	**3.2.1 Laundry Areas**
Principles	To support the well-being and health of residents through the provision of safe and accessible areas for clothes drying.
Guidelines	Provide areas for clothes drying that are centrally located, easily accessible and have visual openness and transparency. These areas, as well as pathways to and from them should be provided with sensor controlled security lighting for after dark collection of laundry. Consider locating laundry areas near to play areas. Laundry areas must be provided with suitable facilities and services including : • Access to adequate services to allow laundry such as metered water / wash troughs. • Token operated machines & dryers as a maximum Ensure drying yards and wash lines are fully exposed to sunlight for largest part of the day. Special consideration to be given for projects in zones with winter rainfall and limited winter daylight such as the Southern Cape Coastal Condensation Area. Consideration could be given to the provision of washing lines either on a balcony – low level screened by wall or internal to bathroom. However, the biggest source of air moisture content leading to condensation and mould growth is drying of clothes indoors. In new build walk up developments drying yards should be placed in areas in close proximity to units. Drying yards attached to circulation cores could also be considered. In mid to high rise building, new build or conversions, consideration should be given to laundry areas and drying areas within the building. In adaptive re-use buildings, the opportunity to re-use existing former toilet areas as laundries spaced through the building can be considered.
Norms & Standards	Laundry areas must be provided with suitable facilities and services. The development should provide Drying Yards and Laundry Facilities on the basis of 0.5-1 linear metre of washing line per unit
Required documentation for evidence	1. Building Design Documentation 2. Specification Document 3. Site Plan showing the location, size and specification of Drying Yards and Laundry Facilities
Corresponding References	This sub-item should be read in conjunction with sub-items: 3.1.2 Common Areas: Lift Lobbies & Provision of Lifts 3.2.3 Passages & Walkways
Practice Note Reference	None

Overarching Item	3.2 Provision of Amenities
Sub-Item	**3.2.2 Refuse Areas**
Principles	To support the wellbeing and health of residents through the provision of sufficient refuse and recycling areas
Guidelines	A central refuse and recycling area should be located close to the entrance of development with an adequate area for bins and for the cleaning of bins. A waterpoint and drain should be provided. The size and location of this area should be in compliance with local authority waste management requirements. In inner city contexts, existing buildings and conversions, refuse areas may be located in basement areas and ground floor yards. In addition, areas should be provided for refuse bins within buildings including: • Refuse areas on each floor for general refuse collection (wheely bins) and recycling bins. This area should be easily accessible and be able to be cleaned. • Cleaners store equipped with sink or slophopper to be provided
Norms & Standards	Refuse and recycling areas must be provided. The size should be determined by the number of bins required as a ratio to the number of units as determined by the Local Authority. A water point and drain are recommended within refuse areas.
Required documentation for evidence	1. Building Designs : Show on Site plan and Floorplans the location, size and specification of Refuse Areas 2. Recycling Areas documentation
Corresponding References	
Practice Note Reference	None

Overarching Item	3.2 Provision of Amenities
Sub-Item	**3.2.3 Provision of Open Space**
Principles	The provision of communal open green space contributes to the health and well-being of residents. It provides the physical setting for the development and provides environmental and climate resilience in terms of water run-off and cool environments.
Guidelines	When providing for open space, consider any existing landscape features and trees and stormwater attenuation and permeable surfaces.
Norms & Standards	Provide both hard and soft landscaped areas within the development.
Required documentation for evidence	1. Site Plan showing trees, landscaped / planted areas, paving and parking areas. 2. Specification of hard surfacing
Corresponding References	This sub-item should be read in conjunction with sub-item: 1.2.3 Hard & Soft Landscaping
Practice Note Reference	None

Overarching Item	3.2 Provision of Amenities
Sub-Item	**3.2.4 Recreational and Play Areas**
Principles	To support the well- being and health of residents and children through the provision of a range of communal outdoor and indoor amenities.
Guidelines	The provision of play areas is context specific and is motivated by best practice. A large percentage of social housing residents are children and therefore all developments, new builds as well as refurbishments and conversions should provide some playground and recreational facilities for children of varying ages. Play areas should be located in areas where there is safe and easy access for children and which are overlooked by adjoining dwellings or other common facilities such as laundry areas. Seating for adults should be provided adjacent to the play area. In larger scaled developments, play areas (outdoor or indoor) should be provided for children of different ages e.g. defined playground area with play equipment for younger children and area for older children for ball play / skateboarding or a homework or study room etc. Indoor play areas should be equipped with suitable play equipment. They must be easily accessible, open with visibility from inside to outside. Where possible they should be monitored by CCTV. Recreational exercise equipment could be considered for adult use in sufficiently sized developments.
Norms & Standards	One playground to be provided for every 200 units that is sufficiently sized to allow play by groups of at least 20 children. Differentiation between recreational facilities for younger children (under 8) and older children (pre-teen / teenagers) Cross Reference with unit space norms: developments with higher percentages of smaller units must show a larger percentage of amenities. Cross Reference with communal amenities provided internally to buildings Playgrounds should comply with SANS51176 : Playground Equipment & Surfacing They need to be safe and secure e.g. If on a roof level a fence provided onto the parapet wall to prevent children from accidentally falling Developments with space constraints can motivate for a different mix of amenities. Developments that are located in the immediate proximity to a public park / playground / community centre that can be safely accessed by residents may motivate for a reduction in the facilities provided on site.
Required documentation for evidence	1. Site Plan showing suitable located play & recreation areas
Corresponding References	This sub-item should be read in conjunction with sub-items: 3.2.3 Provision of Open Space

	1.1.1 Location of the project 3.2.5 Other Amenities 4.1.2 Unit Size
Practice Note Reference	None

Overarching Item	3.2 Provision of Amenities
Sub-Item	**3.2.5 Other Amenities**
Principles	To support the well-being and health of residents through the provision of other amenities such as community meeting rooms, braai areas, storage and facilities for cultural observances etc.
Guidelines	Depending on the size of the development community amenities should be provided such as: space for early childhood centre, Community Hall, Braai Areas, storage facilities and Facilities for cultural observances etc. These areas should be provided with the requisite supportive services and infrastructure as required e.g. toilets, wash up areas etc. Housing Conversions often have underutilised spaces within the circulation cores, for example, former office toilets and redundant service areas that are easily adaptable for a range of community facilities. Where possible these spaces should be monitored by CCTV.  Example of recreation area in former mechanical plant area of tower development ©Savage + Dodd Architects | UrbanWorks
Norms & Standards	New Build Developments (walk up / mid rise) Developments with over 400 units should provide a multi-purpose community meeting room for meetings with 20-30 adults. Developments with more than 1000 units should provide a larger scale hall or meeting facility or show that such a facility is available and easily accessible within the immediate environment. Refurb / Conversion : Show how redundant spaces within the building are being fully utilised.
Required documentation for evidence	1. Site Plan
Corresponding References	This sub-item should be read in conjunction with sub-items: 3.2.4 Recreational and Play Areas 4.1.2 Unit Size
Practice Note Reference	None

Overarching Item	3.3 Services
Sub-Item	**3.3.1 Services Reticulation**
Principles	The reticulation of services can have an impact on the long-term maintenance of the building in terms of access for maintenance, meter reading and efficiency of delivery of services for example hot water.
Guidelines	Show plant areas for services: hot water, electrical, Information Technology etc. Describe how services are reticulated in common areas and into units e.g. vertical ducts, surface mounted, cable trays etc. Services should be grouped for efficiencies and ducts must be adequately designed for access for maintenance Consideration should also be given to how services may be reticulated in the future, for example fibre roll outs without impacting on existing finishes. Consideration to be given to requirements for cabling and IT points for access control / hold open doors (fire) / metering systems as may be required
Norms & Standards	Services should be grouped for efficiencies and considered in terms of access for maintenance and metering in relation to common areas / walkways.
Required documentation for evidence	1. Services layout showing notional services reticulation or; 2. Building Services Report
Corresponding References	This sub-item should be read in conjunction with sub-items related to services.
Practice Note Reference	None

Overarching Item	3.3 Services
Sub-Item	**3.3.2 Services : Hot Water Provision**
Principles	Demonstrate Compliance with SANS10400 XA : Hot water provision
Guidelines	Hot water may be provided by a variety of systems such as heat pumps, solar, magnetic induction geysers, gas and hybrid systems. In all cased the efficiencies of the system should be evaluated in relation to the cost of producing hot water Demonstrate Compliance with SANS10400 XA : Hot water provision : Describe how hot water will be provided Provide COP efficiency of system if relevant* Describe where plant is located Describe how system is reticulated in building. Note that a significant amount of energy can be lost in a system due to heat loss in the storage tank and distribution system. It is therefore critical that the system is designed efficiently in order to reduce these losses. * With Heat Pumps: The coefficient of performance (COP) is a measure of the heat pump's efficiency. It is determined by dividing the energy output of the heat pump by the electrical energy needed to run the heat pump, at a specific temperature. The higher the COP, the more efficient the heat pump. Typical heat pump water heaters are two to three times more efficient than standard electric water heaters.
Norms & Standards	Compliance with SANS10400 XA
Required documentation for evidence	1. Design / Services Report
Corresponding References	This sub-item should be read in conjunction with sub-items: 2.2.1, Services Reticulation 2.4.2, Energy Efficiency 4.7.3 Metering.
Practice Note Reference	Choosing and evaluating a hot water system

Overarching Item	3.3 Services
Sub-Item	**3.3.3 Ventilation**
Principles	To ensure that common areas are adequately ventilated
Guidelines	Where possible all common area passages should be naturally ventilated. Where this is not possible by design, in for example an existing building with a double loaded passage configuration, suitable mechanical fresh air and extraction systems are required. Ventilation is important not only for the passage / walkway areas themselves but also because rooms facing onto these areas, often bathrooms and kitchens may ventilate onto them.
Norms & Standards	Compliance with SANS 10400 Part O.
Required documentation for evidence	None
Corresponding References	This sub-item should be read in conjunction with sub-items: 2.2.1 Service Reticulation 2.1.4 Design of Buildings: Cross ventilation.
Practice Note Reference	None

Overarching Item	3.3 Services
Sub-Item	**3.3.4 Fire Equipment**
Principles	Provision of safe environments
Guidelines	Fire equipment to be located in common areas easily visible and accessible locations. The security of fire equipment should also be considered in terms of lockable cabinets for fire extinguishers if deemed a theft risk.
Norms & Standards	As determined by statutory requirements.
Required documentation for evidence	Compliance with SANS10400 unless a Rational Plan by a competent person is supplied. Rational Fire Design (not required to be submitted at design stage but required for plan approval)
Corresponding References	
Practice Note Reference	None

Overarching Item	3.3 Services
Sub-Item	3.3.5 Safety & Security: Monitoring : CCTV
Principles	Safety and security of residents though surveillance and monitoring of common areas where possible.
Guidelines	The safety of residents especially women and children should be considered especially in common areas and open areas. This can be done through a variety of passive techniques such as locating play areas where they are overlooked but CCTV should be considered in other areas. CCTV provided to monitor common areas.
Norms & Standards	None
Required documentation for evidence	None
Corresponding References	
Practice Note Reference	None

Overarching Item	3.4 Maintenance & Management
Sub-Item	**3.4.1 Material Specifications : Common Areas, Lobbies, Passages**
Principles	This item relates to the material specification required for common area lobbies, passages and circulation areas in relation to durability and safety.
Guidelines	Consideration needs to be given to the following when specifying materials & finishes : • Uniformity of floor surface • Slip resistant flooring • Colour (in relation to lighting and sight / cleaning) • Conformance to Disability requirements in relation to changes of texture, colour (partially sighted), tactile indicators etc. • Maintenance of wall finishes in relation to high wear areas All materials supplied should be readily available locally on an ongoing basis. Materials should be SABS Approved. Stock / Product Ranges and spares should be readily available locally. Specifications should be performance based and should be specified by make and type of item as closely as possible. Guarantees & Warranties on products must be available.
Norms & Standards	None
Required documentation for evidence	1. Specifications 2. Product Data Sheets 3. Where non/un-conventional materials or building systems are selected the performance of these must be demonstrated in terms of the required Test Reports & Certification (such as agrement certification) as per SANS 10400 Part A.
Corresponding References	This sub-item must be cross referenced to Items: 3.1 Common Areas 3.2 Provision of Amenities
Practice Note Reference	Practice Note on materiality and specifications to be provided

Overarching Item	3.5 Accessibility
Sub-Item	**3.5.1 Access to units**
Principles	Units must be accessible to persons with mobility issues.
Guidelines	All new builds to have step free access to building entrances and entrances to units. Ramps to be provided if required in terms of change of level. Care needs to be taken at entrance thresholds and to make sure there are no steps along the route to the lift lobby. In passages and lobbies: wall mounted fire hose-reels etc must not impede mobility of partially sighted people.
Required documentation for evidence	1. Building Plans
Corresponding References	This sub-item must be cross referenced to Item: 3.1 Common Areas
Practice Note Reference	Accessibility Guidelines to be developed

Overarching Item	3.6 Sustainability
Sub-Item	**3.6.1 Lighting**
Principles	Energy Efficient Lighting to reduce lighting energy use and common area costs.
Guidelines	Lighting accounts for a significant proportion of total energy use in residential buildings. Efficient lamps, that produce more light with less power compared to standard incandescent bulbs, reduce the building's energy use for lighting. Maintenance costs are reduced as the service life of these types of bulbs is longer than that of incandescent bulbs. Energy Efficient Lighting should be specified in all projects. Common area lighting to be controlled with presence detection and/or daylight control.
Norms & Standards	90% of light bulbs used in the project use either compact fluorescent (CFL), LED, or T5, or other types of light fixtures that achieve 90 lm/W or greater. At least 90% of the lamps must be of the efficient type. Other efficient technologies are also available. If another technology is used, documentation must be provided to demonstrate that the light fixtures achieve at least 90 lm/W. Therefore this metric can also be demonstrated by showing energy savings through evidence provided by a competent professional.
Required documentation for evidence	1. Schedules : demonstrate that CFL, LED, or T5 lamps have been specified 2. Product Data Sheets
Corresponding References	This sub-item must be cross referenced to Items relating to Common Areas and passages
Practice Note Reference	Practice note on lighting to be provided

Overarching Item	3.6 Sustainability
Sub-Item	**3.6.2 Common Areas : Metering & Sub Metering**
Principles	Metering is an integral part of conserving energy and resources during a buildings operational life. Information from metering and sub-metering as a building level allows building managers to monitor and evaluate building efficiencies.
Guidelines	Common areas electrical use to be monitored in terms of sub-metering and an effective monitoring system of this should be put in place by the SHI.
Norms & Standards	A strategy for metering is to be provided that takes into account bulk metering, sub metering and individual metering of both electricity, water and any other services such as gas that may be provided. Metering to be provided to the development / building and to separate buildings and areas as required to provided adequate information to the SHI. Residential and retail areas or uses that have different rating tariffs must be metered separately.
Required documentation for evidence	None
Corresponding References	This sub-item must be cross referenced to sub-item: 3.3.2 Hot Water System
Practice Note Reference	None

3.4 Level 4: Unit Design

Overarching Item	4.1 Design : Space norms and standards
Sub-Item	**4.1.1 Unit Design**
Principles	All units should be fit for purpose as a home to allow residents to enjoy privacy in a secure and safe environment.
Guidelines	Internal environments should be comfortable and capable of accommodating the necessary furniture and equipment associated with specific room activities and be suitable for the needs of intended user groups. A development should contain a mix of units appropriately sized to allow a diversity of household sizes in relation to context and market demand.
Norms & Standards	Units must comply with unit size norms and minimum room sizes. Unit planning must demonstrate space planning in relation to the required fittings and furnishings per room type.
Required documentation for evidence	1. Unit Plans of all typologies with dimensions and dimensions shown
Corresponding References	This sub-item must be cross referenced to sub-item: 4.2.1 Space Planning
Practice Note Reference	Practice note to be developed on unit mix and principles per unit type.

<table>
<tr><td>Overarching Item</td><td>4.1 Design : Space Norms & Standards</td></tr>
<tr><td>Sub-Item</td><td>4.1.2 Unit Size</td></tr>
<tr><td>Principles</td><td>To provide guidance of a range of unit sizes per typology.</td></tr>
<tr><td>Guidelines</td><td>The smaller the unit the more attention must be paid to layout of furniture, fittings and storage. For example if a micro-unit / bachelor unit at the lowest end of the size range is proposed, the design must show how the unit is furnished and how kitchen and clothes storage are accommodated

The larger the percentage of smaller units (specifically micro units of less than 20m2) in the overall mix, the more communal amenities must be provided</td></tr>
<tr><td>Norms & Standards</td><td>Compliance with table below : Unit Size Range per unit type and occupancy

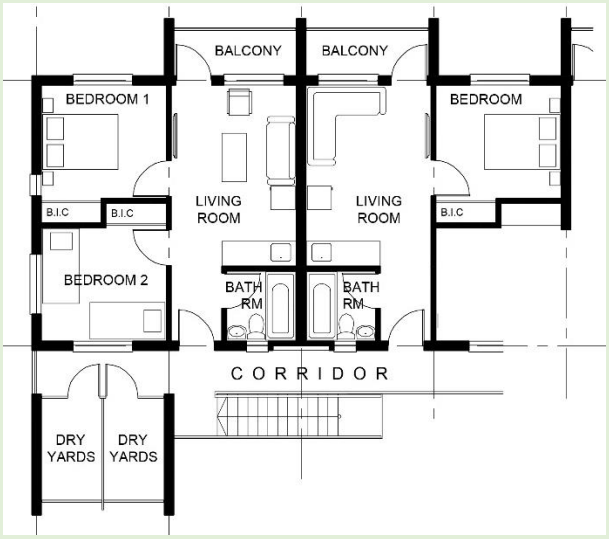
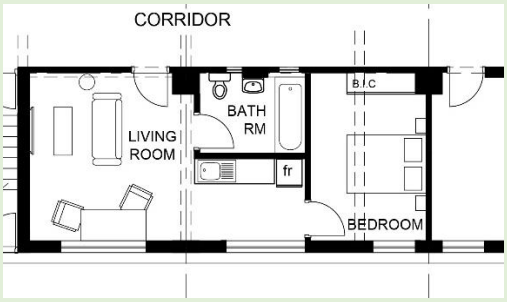
The method of determining unit areas is defined as the Floor Area measured within the finished surfaces of the exterior bounding walls of the unit

<table>
<tr><th colspan="4">Unit Size Range per unit type and occupancy</th></tr>
<tr><th>Type of Unit</th><th>Optimum Size (m2)</th><th>Minimum size (m2)</th><th>Occupancy *</th></tr>
<tr><td>Room</td><td>12</td><td>10</td><td>1b1p</td></tr>
<tr><td>Bachelor / Studio</td><td>25</td><td>18</td><td>1b2p</td></tr>
<tr><td>1 Bedroom</td><td>35</td><td>25</td><td>1b2p / 2b3p</td></tr>
<tr><td>2 Bedroom</td><td>48</td><td>42</td><td>3b3p / 4b4p</td></tr>
<tr><td>3 Bedroom</td><td>60</td><td>52</td><td>3b4p / 5b6p</td></tr>
</table>

All room sizes and ceiling heights must be in compliance with SANS 10400 Part C</td></tr>
<tr><td>Conditional Requirements</td><td>Compliance with minimum average unit size</td></tr>
<tr><td>Required documentation for evidence</td><td>1. Design Layouts of all floors / buildings : Typical floor plans with all units showing relationship between units, circulation, servicing
2. Table of unit sizes and percentages of different unit typologies
3. Demonstration of compliance with minimum average unit size</td></tr>
<tr><td>Corresponding References</td><td>This sub-item must be cross referenced to sub-item:

4.1.3 Mix of Unit types & sizes</td></tr>
<tr><td>Practice Note Reference</td><td>Practice Note to be developed on unit sizes and design parameters within unit types and definition of the method of measurement.</td></tr>
</table>

Overarching Item	4.1 Design : Space Norms & Standards
Sub-Item	**4.1.3 Mix of unit types & sizes**
Principles	The overall development must demonstrate a mix of unit typologies that are responsive to varying family types and affordability levels.
Guidelines	Unit mix to be substantiated by market demand studies or analysis of similar developments within the SHI portfolio. If a development with only 1 type of housing typology is proposed this must be substantiated by relevant target market data.
Norms & Standards	The average size of a unit across all units aggregated should aim to equal or exceed $30m^2$ except in specialist housing models, unless specifically motivated in terms of project typology, context and location.
Required documentation for evidence	1. Schedule of Unit Types and Sizes 2. Market Demand Analysis which must include evidence of demand for specific product sizes based on availability within area and location, waiting lists specifically highlighting family types and demographics of area.
Corresponding References	This sub-item must be cross referenced to sub-item: 4.1.2 Unit Size
Practice Note Reference	Practice note to be developed on unit mix and principles per unit type.

Overarching Item	4.1 Design : Space Norms & Standards
Sub-Item	**4.1.4 Shape**
Principles	To achieve an efficient unit external wall to unit depth ratio.
Guidelines	Consideration to be given to unit width and length ratios in relation to natural ventilation and sun penetration  Example: longer length to width of unit. Allow adequate cross ventilation and light penetration to all rooms.  Example: narrow width unit with longer façade length: better sun penetration but less efficient in terms of building envelope. This unit configuration is more likely in narrow building width conversions.
Norms & Standards	None
Required documentation for evidence	1. Unit Designs showing dimensions ; length to width ratios
Corresponding References	This sub-item must be cross referenced to sub-item: 2.1.4 Design of buildings: Cross ventilation 4.2.1, Unit Plans: Space Planning

Practice Note Reference	None
Overarching Item	**4.2 Design of Unit**
Sub-Item	**4.2.1 Unit Plans: Space Planning**
Principles	Units must be designed with resident's requirements in mind as well as allowance for future retrofitting. This produces flexible units that cater for future retrofitting as well that allow possible product differentiation for differing income bands.
Guidelines	Unit Plans to show all fittings and furniture layouts including electrical (Lighting and power points in relation to furniture).
Norms & Standards	None
Required documentation for evidence	1. Unit plans showing base kitchen fittings and possible layouts for future extension of kitchen units and bedroom cupboards.
Corresponding References	This sub-item must be cross referenced to sub-items: 4.1.4 Shape 5.2.1 – 5.2.6
Practice Note Reference	Practice Note to be developed on planning for retrofits.

Overarching Item	4.2 Design of Unit
Sub-Item	**4.2.2 Entrance**
Principles	Ensure that entrances are considered as part of space planning in units.
Guidelines	Due to space constraints, units may not necessarily have specific entrance areas. The area into which one enters the unit must have an easily accessible light switch. Moreover, consideration should be given to entrance areas and any likely impediments to access.
Norms & Standards	None
Required documentation for evidence	1. Unit Layouts
Corresponding References	This sub-item must be cross referenced to sub-item items: 4.1.4 Shape 4.2.1 Unit Plans: Space Planning
Practice Note Reference	None

Overarching Item	4.2 Design of Unit
Sub-Item	**4.2.3 Kitchen Area : Space Planning : Self Contained Unit**
Principles	Ensure that kitchen areas are considered as part of space planning in units.
Guidelines	Show designated kitchen area which makes allowances for : A kitchen surface of minimum length 1200 but preferably, at least 1500 – 2100 length with single bowl sink and drainer Consideration should be given to a deeper bowl (pot) sink which can be provided within similar cost parameters to standard sink units and allows laundry to be done in the kitchen area. Adequate area for food preparation Space for a 2 plate surface stove or microwave Kitchen cupboard : wall mounted or under counter Allowable area and service points for a stove and a single door fridge. Service points : Water and drain hook up for future installation of washing machine Electrical plug points sufficient to service dedicated points such as fridge / stove as well as small appliances such as kettle etc. The kitchen design should make allowances for a future retrofitting of additional work surfaces and cupboards. Illustrate how kitchen area can be retrofitted with future space for stove, washing machine and additional work surface The kitchen should have adequate light and ventilation.
Norms & Standards	Minimum compliance status : Kitchen unit of 1200 with single bowl sink and drainer. Stove point as per municipal by-law requirements and SANS requirements Allowance for washing machine point connection to plumbing
Required documentation for evidence	1. Unit Layout 2. Finishes Schedule
Corresponding References	This sub-item must be cross referenced to sub-item items: 4.1.4 Shape 4.2.1 Unit Plans: Space Planning
Practice Note Reference	Practice Note to be developed on kitchen design and elements.

Overarching Item	4.2 Design of Unit
Sub-Item	**4.2.4 Living Room**
Principles	Ensure that differentiation of living spaces is considered as part of space planning in units.
Guidelines	The living room must be adequately sized to accommodate the following with adequate circulation space between rooms. Double seater couch, table / TV unit. Provision for at least a small table within the living or kitchen area. Show adequate electrical points to service TV and lighting points. Circulation through the room should be considered so as to maximise the usable area for furniture.
Norms & Standards	None
Required documentation for evidence	1. Unit Layout showing furniture positions and services points 2. Finishes Schedule
Corresponding References	This sub-item must be cross referenced to sub-items: 4.1.4 Shape 4.2.1 Unit Plans: Space Planning
Practice Note Reference	None

Overarching Item	4.2 Design of Unit
Sub-Item	**4.2.5 Bedroom (main)**
Principles	Ensure that bedrooms are considered as part of space planning in units.
Guidelines	Bedroom should be sized adequately to allow circulation around furniture Minimum room width for bedrooms should be at minimum 2.4m to ensure adequate circulation space within the room The main bedroom should be able to contain a double bed or 2 single beds, side table and a space for a cupboard. Bedroom must have allowable space for cupboards to be fitted All bedrooms must have natural light and ventilation.
Norms & Standards	Room sizes should exceed the minimum habitable room size.
Required documentation for evidence	1. Unit Layout showing furniture positions and services points 2. Finishes Schedule
Corresponding References	This sub-item must be cross referenced to sub- items: 4.1.4 Shape 4.2.1 Unit Plans: Space Planning
Practice Note Reference	Practice Note to be developed on bedroom requirements.

Overarching Item	4.2 Design of Unit
Sub-Item	**4.2.6 Bedroom (second)**
Principles	Ensure that bedrooms are considered as part of space planning in units.
Guidelines	The second bedroom should be able to accommodate a single bed or single bunkbed. It should be possible to arrange the bed in at least 2 possible positions. Minimum room width for bedrooms should be at minimum 2.4m to ensure they exceed minimum habitable room size. Bedroom must have space for cupboards to be fitted
Norms & Standards	Room sizes should exceed the minimum habitable room size.
Required documentation for evidence	1. Unit Layout showing furniture positions and services points 2. Finishes Schedule
Corresponding References	This sub-item must be cross referenced to sub- items: 4.1.4 Shape 4.2.1 Unit Plans: Space Planning
Practice Note Reference	Practice Note to be developed on bedroom requirements.

Overarching Item	4.2 Design of Unit
Sub-Item	**4.2.7 Access to outdoor space and balconies**
Principles	Ensure that residents have access to outdoor spaces and balconies.
Guidelines	If possible, ground floor units should have access to outdoor space directly from the unit. In new build walk up developments consideration to be given to unit differentiation through a percentage of units to be provided with balconies.
Required documentation for evidence	1. Building Plans Layouts
Corresponding References	This sub-item must be cross referenced to sub-item: 1.2.2 Architectural Diversity & Building Massing
Practice Note Reference	None

Overarching Item	4.3 Materiality : Specifications
Sub-Item	**4.3.1 Floors**
Principles	Specifications of finishes should be of good quality and durability.
Guidelines	Floor Finishes specified should meet the following requirements : 1. Be robust and hard wearing 2. Easily maintained and cleaned 3. Considered in terms of lifecycle costing
Norms & Standards	None
Required documentation for evidence	1. Finishes Schedule
Corresponding References	This sub-item must be cross referenced to sub-item: 2.3.1 Operations Manuals
Practice Note Reference	Practice Note to be developed

Overarching Item	4.3 Materiality : Specifications
Sub-Item	**4.3.2 Walls : Construction & Finishes**
Principles	Specifications of finishes should be of good quality and durability.
Guidelines	All wall **materials** (conventional or non/un-conventional) should be considered in terms of : Durability of construction & finish Separating walls must be compliant with required Fire ratings Acoustically fit for purpose All wall **finishes** specified should meet the following requirements : Be robust and hard wearing Easily maintained and cleaned Considered in terms of aesthetic and quality of light Considered in terms of lifecycle costing Tile splashbacks should be provided in bathroom and kitchen areas
Norms & Standards	Finishes should have 7-10 year warranty
Required documentation for evidence	1. Finishes Schedule 2. Where non/un-conventional materials or building systems are selected the performance of these must be demonstrated in terms of the required Test Reports & Certification (such as agrement certification) as per SANS 10400 Part A.
Corresponding References	This sub-item must be cross referenced to sub-item: 2.3.1 Operations Manuals
Practice Note Reference	None

Overarching Item	4.3 Materiality : Specifications
Sub-Item	**4.3.3 Ceilings**
Principles	Specifications of finishes should be of good quality and durability.
Guidelines	Ceiling and soffits specified should meet the following requirements : Be robust and hard wearing Easily maintained Easily serviced in terms of lighting Considered in terms of lifecycle costing Have a fire rating if required Ceilings to have adequate insulation
Norms & Standards	None
Required documentation for evidence	1. Finishes Schedule
Corresponding References	This sub-item must be cross referenced to sub-item: 2.1.7 Building Envelope: Roofs 2.3.1 Operations Manuals
Practice Note Reference	None

Overarching Item	4.3 Materiality : Specifications
Sub-Item	**4.3.4 Bathroom**
Principles	To ensure that bathroom are adequately designed with durable finishes and fittings
Guidelines	The bathroom needs to have a bath or shower, basin and toilet with toilet roll holder, towel rails, mirror and a medicine cabinet / shelf Consideration to be given to the choice between showers or baths in relation to water use. If budget allows, baths may have showers over or showers may have an additional low level tap to allow for filling a tub for washing children or laundry Bathroom to have adequate floor and wall finishes that are slip resistant, durable and easily cleanable. Finishes to be considered in relation to water and steam ingress and mould formation. If space allows consideration may be given to allowing space for a washing machine within the bathroom areas rather than the kitchen Taps, mixers, valves, WC cistern flushing mechanisms should be easily serviced with locally available spare parts
Norms & Standards	Sanitaryware to have 10 year warranty Taps to have 10 year warranty
Required documentation for evidence	1. Finishes Schedule
Corresponding References	This sub-item must be cross referenced to sub-item: 2.3.1 Operations Manuals
Practice Note Reference	None

Overarching Item	4.3 Materiality : Specifications
Sub-Item	**4.3.5 Kitchen Fittings**
Principles	Specifications of finishes should be of good quality and durability.
Guidelines	Kitchen worktops must of a durable and long lasting material and finish and not prone to damage by water ingress or placing of hot utensils on them. Kitchen cupboards either under counter or wall mounted must be of a sturdy and durable material and construction especially in relation to door construction / materiality and hinges.
Norms & Standards	None
Required documentation for evidence	1. Finishes Schedule
Corresponding References	This sub-item must be cross referenced to sub-item: 2.3.1 Operations Manuals 4.23 Kitchen space planning
Practice Note Reference	None

Overarching Item	4.3 Materiality : Specifications
Sub-Item	**4.3.6 Materials : Finishes**
Principles	Material Selection to be considered against a series of requirements and outcomes
Guidelines	All materials supplied should be readily available locally on an ongoing basis. Materials should be SABS Approved or have an Agrement Certificate Spares should be readily available locally Specifications should be performance based and should be specified by make and type of item as closely as possible. Guarantees & Warranties must be available Service Periods must be specified
Norms & Standards	None
Corresponding References	This sub-item must be cross referenced to sub-item: 2.3.1 Operations Manuals 2.3.2 Maintenance Schedules
Practice Note Reference	Practice Note on specifications techniques to be developed

Overarching Item	4.4 Services
Sub-Item	**4.4.1 Ventilation**
Principles	To ensure that units are adequately ventilated with enough fresh air to counteract the build-up of indoor pollutants and moisture
Guidelines	Cross ventilation should be a core consideration in designing units. All rooms to be naturally ventilated wherever possible. Bedrooms must have natural ventilation Bathroom Ventilation : Ventilation of bathrooms to be considered in relation to natural or mechanical ventilation In single loaded passage typologies bathrooms should be located on the walkway side of the unit and ventilate to the walkway. In conversions where bathrooms may be internal without the option of an external window, they must be provided with an extract fan or mechanical extraction. Kitchen areas should have a window to an outside ventilated passage / walkway Ventilation to be considered in relation to mould prevention in both bathrooms and kitchens
Norms & Standards	With natural ventilation is not achieved, mechanical ventilation / extraction must be specified
Required documentation for evidence	1. Building Plans
Corresponding References	This sub-item must be cross referenced to sub-item: 3.3.1 Ventilation
Practice Note Reference	None

Overarching Item	4.4 Services
Sub-Item	**4.4.2 TV / Satellite / IT / Fibre**
Principles	Services to be designed for centralised systems to prevent the multiple individual connections within buildings
Guidelines	Unit to should be centrally cabled so as prevent multiple satellite dishes being installed by tenants. Ensure allowance for cabled point to living room The service backbone and routing to be considered for future retrofitting of services such as fibre etc
Norms & Standards	Centrally cabled satellite TV
Required documentation for evidence	None
Corresponding References	This sub-item must be cross referenced to sub-item: 3.3.1 Services Reticulation
Practice Note Reference	None

Overarching Item	4.5 Maintenance & Management
Sub-Item	**4.5.1 Building User / Occupants Guide**
Principles	A Building User / Occupants Guide gives the resident guidance on how to use and maintain the unit.
Guidelines	The Building User / Occupants Guide should give guidance to the resident on the use of unit including ; How to use the services (metering, refuse, etc) Cleaning Replacement of light bulbs Fitting a washing machine Safety requirements : fire and emergency procedures Energy and water saving measures
Norms & Standards	None
Required documentation for evidence	1. On completion of Project
Corresponding References	This sub-item must be cross referenced to sub-item: 2.3.1 Operations Manual
Practice Note Reference	Practice Note to be developed on Tenant's guide

Overarching Item	4.6 Accessibility
Sub-Item	**4.6.1 Bathroom Design**
Principles	Design that enables retrofitting for people with disabilities and mobility issues.
Guidelines	Accessible bathrooms to be designed to be retrofitted in a percentage of units as required by the SHI. This would include : Adequate door width to bathroom within minimum clear opening of 900mm with door opening outwards Accessible showers rather than baths Grabrails Suitable taps etc
Required documentation for evidence	1. Unit Plan of accessible unit type fully compliant with SANS10400 Part S and relevant accessibility guidelines
Corresponding References	This sub-item must be cross referenced to sub-item: 4.3.4 Bathrooms
Practice Note Reference	Practice Note to be developed : Accessibility Retrofitting Guidelines

Overarching Item	4.6 Accessibility
Sub-Item	**4.6.2 Accessible Kitchens**
Principles	Design that enables retrofitting for people with disabilities and mobility issues.
Guidelines	Accessible kitchen units to be designed to be retrofitted in a percentage of units as required by SHI.
Norms & Standards	As per Accessibility Retrofitting Guidelines
Required documentation for evidence	1. Unit Plan of accessible unit type fully compliant with SANS10400 Part S and relevant accessibility guidelines
Corresponding References	This sub-item must be cross referenced to sub-item: 4.3.5 Kitchen fittings
Practice Note Reference	Practice Note to be developed

Overarching Item	4.7 Sustainability
Sub-Item	**4.7.1 Lighting Internal to Unit**
Principles	Units to have energy efficient lighting to minimise lighting energy use and costs
Guidelines	Lighting accounts for a significant proportion of total energy use in residential buildings. Efficient lamps, that produce more light with less power compared to standard incandescent bulbs, reduce the building's energy use for lighting. Maintenance costs are reduced as the service life of these types of bulbs is longer than that of incandescent bulbs. Light Fittings should take CFL lamps at a minimum but preferably should be LED Luminaires. Bulbs should be easily available to tenants for purchase
Norms & Standards	At least 90% of the lamps must be of the efficient type in all habitable spaces. No light fittings that use incandescent light bulbs to be specified.
Required documentation for evidence	1. Lighting Schedule : Specifications
Corresponding References	This sub-item must be cross referenced to sub-item: 3.6.1 Lighting
Practice Note Reference	Practice Note to be developed

Overarching Item	4.7 Sustainability
Sub-Item	**4.7.2 Water Use**
Principles	To reduce water usage
Guidelines	Taps : By specifying low-flow taps kitchen sinks and bathroom fittings, water use is reduced without adversely affecting the functionality. Hot water use is also reduced, reducing energy consumption for heating the water. Many different taps are available that meet the flow rate required. To maintain user satisfaction at the lower flow rates, some manufacturers mix water with air to cause turbulence in the flow; this in turn gives an increased sense of pressure without increasing the flow rate. Flow restrictors or aerators can be added on to the specified faucets to reduce the flow rate, which may be a cheaper alternative to purchasing a low-flow faucet. It is important to note that the flow rate of a tap is dependent on the water pressure and manufacturers often provide a chart that plots the flow rate at different pressures. Toilets and cisterns : Toilets can either be specified with a dual flush cistern or a single flush cistern. If the use of a dual flush cistern is not clearly understood the water saving measures may not be achieved. Guidance on Water Efficient Fittings : Low flow showerheads 8L/min Low flow taps for kitchens sinks 6L/min Low flow taps for Bathrooms sinks 6L/min Dual Flush toilet cisterns in bathrooms 6L/first flush and 3L/second flush Single Flush cisterns 6L/flush
Norms & Standards	The specification of water efficient fittings that achieve the flow rates as stipulated above or those stipulated by a metric such as the GBCSA Green Buildings Tool / Edge Rating Tool or by the municipal entity.
Required documentation for evidence	1. Specifications
Corresponding References	This sub-item must be cross referenced to sub-item: 4.3.4 Bathrooms 4.3.5 Kitchen fittings
Practice Note Reference	None

Overarching Item	4.7 Sustainability
Sub-Item	**4.7.3 Metering**
Principles	Installation of smart metering
Guidelines	The metering of services allows tenants to monitor and manage their services consumption and bills. The location of meters should be related to services ducts and plant areas. The metering of water should be considered in terms of hot and cold water metering in relation to the revenue collection of the SHI.
Norms & Standards	All units to have individual water and electricity metering Consideration should be paid to the type of metering : smart metering, prepaid etc
Required documentation for evidence	1. Specifications
Corresponding References	This sub-item must be cross referenced to sub-item: 3.6.2 Metering & sub metering
Practice Note Reference	None

Overarching Item	4.7 Sustainability
Sub-Item	**4.7.4 Health & Safety : Hazardous Materials**
Principles	To reduce health risks to residents by removing materials with hazardous content such as Asbestos and Lead.
Guidelines	An assessment should be made of existing properties before construction commences to ensure that no hazardous materials are present within the building or environment. This includes the safe disposal of items such as fluorescent tubes. Hazardous materials much be removed by a specialist.
Norms & Standards	Certification of removal by approved contractor.
Corresponding References	This sub-item must be cross referenced to sub-item: 4.3.6 Materials

Overarching Item	4.7 Sustainability
Sub-Item	**4.7.5 Use of sustainable Materials**
Principles	To encourage the use of materials that minimise the impact on the environment in terms of their embodied energy values To reduce health risks to residents by reducing the use of material with hazardous content.
Guidelines	Embodied energy is the energy consumed by all of the processes associated with the production of a building specifically building materials from the mining and processing of natural resources to the manufacturing, transport and delivery. Materials should be locally sourced wherever possible Volatile Organic Compounds (VOC) are organic compounds that produce vapours (off gassing) readily at room temperature and normal atmospheric pressure. Most commonly recognised with the strong smells in newly painted rooms or the smell of glues used in flooring adhesives Use of interior finishes that minimise the levels of Volatile Organic Compounds (VOC) should be specified. These are floor and wall coverings, and in particular, paints. All paints specified should be low VOC paints.
Norms & Standards	The use of interior finishes that minimise the levels of Volatile Organic Compounds (VOC) should be specified. These are floor and wall coverings, and in particular, paints where low or no VOC paints should be specified.
Required documentation for evidence	1. Specifications
Corresponding References	This sub-item must be cross referenced to sub-item: 4.3.6 Materials
Practice Note Reference	Practice Note to be developed

Overarching item	4.8 Lease Agreement
Sub-Item	**4.8.1 Lease agreement**
Principles	A mutually rewarding relationship between landlord and tenant.
Guidelines	The lease is a record of what has been agreed and 'governs' the relationship between the landlord and tenant. The lease agreement must cover: • A detailed description of the rental property/accommodation – what's included and excluded – and a list of accepted defects upon occupation by tenant. • Detailed particulars of the landlord and tenant. • The lease and notice periods. • The amount of rental and any other additional costs payable by the tenant and terms of payment. • Annual escalation. • Amount of deposit payable and its purpose (defray repair expenses if any). • Detailed information on what the rights and obligations of the landlord are, with specific focus on maintenance and repairs and arrangements for access by landlord into the premises. • Detailed information on what the rights and obligations of the tenant are, with specific focus on use/abuse of the premises, fittings and fixtures, any applicable complex or Body Corporate Rules and subletting. • Breach and remedy T and C's.
Norms and Standards	The lease agreement is to be in writing and signed by both parties. The provisions of the lease are to comply with the Rental Housing Amendment Act, 2014, the Formalities in Respect of Leases of land Act, 1969, the applicable provisions of the Consumer Protection Act, 2008 and its final Regulations of 2011, The Sectional Title Scheme management Act as amended, any prevailing Municipal by-laws, the Estate Agency Affairs Act, 1976 (if estate agent is the landlord), the Prevention of Illegal Eviction From and Unlawful Occupation of Land Act, 1998 and the Immigration Act 13 of 2002.

4 Norms & Standards for Communal Housing

The following norms and Standards apply to the provision of rooms with shared bathroom & kitchen amenities which may be provided as a component of a social housing development, communal housing, / 'SRO- single room occupancy' typology, special needs or supported housing, transitional or temporary emergency housing.

Reference should be made to the matrix in section 2.8 for compliance criteria in terms of Levels 1-4 in addition to the Items below.

Overarching Item	5.1 Rooms with shared amenities
Sub-Item	**5.1.1 Unit Design**
Principles	To ensure that rooms within a communal environment are adequately sized and designed to allow residents to enjoy privacy in a secure and safe environment.
Guidelines	Rooms must be adequately sized to allow a cooking area separate from the sleeping / bed area. The room width should be adequately sized to allow space for a double bed with circulation space. There should be enough space to allow a cupboard The cooking area should have a built in surface adequately sized for food preparation and a 2 plate surface stove or microwave and an area for a fridge. A double plug should be provided located so that the fridge plug and stove can use it.
Norms & Standards	Exceed statutory minimum room size
Required documentation for evidence	1. Unit Layout showing furniture positions and services points 2. Finishes Schedule
Corresponding References	This sub-item must be cross referenced to the sub-items: 4.1.4 Shape 4.2.1 Unit Plans: Space Planning
Practice Note Reference	

Overarching Item	5.2 Communal Amenities
Sub-Item	**5.2.1 Bathrooms**
Principles	This requirement is relative to buildings with single rooms and communal facilities.
Guidelines	Where single rooms are provided in developments. Common area bathrooms must be provided for both male and female tenants. Designs should not allow direct sightlines from passages into bathrooms. Consideration to be given to safety and security of residents: where possible install CCTV outside bathroom entrance door.
Norms & Standards	The number of ablutions to be provided is in accordance with the tables contained in SANS10400. Notwithstanding, consideration should be given to the following : • The provision of bathroom facilities for different genders should be designed to ensure privacy and the safety of users. • The facilities should not only be designed as communal facilities but include a mix of standalone bathrooms with bath or shower, basin and toilet suitable for family use • Access to some 'family' bathroom units should be accessible from a common passage i.e. not from either a male or female bathroom area • Showers should have a change area within the cubicle • Toilets with a basin within the cubicle • To be provided with hot and cold water Strategies for metering of water to be considered i.e. is hot and cold water metered on a smart card basis or services covered within the room rental services charges.
Required documentation for evidence	1. Building plan 2. Evidence of calculation method for number of bathrooms in relation to number of rooms in development
Corresponding References	This sub-item must be cross referenced to sub-items items: 4.1.4 Shape 4.2.1 Unit Plans: Space Planning
Practice Note Reference	None

Overarching Item	5.1 Communal Amenities
Sub-Item	**5.2.2 Kitchens**
Principles	This requirement is relative to buildings with single rooms and communal facilities.
Guidelines	Where single rooms are provided in developments, common kitchens should be provided. It is noted that most tenants may choose to cook within their individual spaces. Common area kitchens must be provided with suitable areas for washing and cleaning dishes and well as cooking if required. Moreover, seating should be provided in these areas Kitchen areas must be suitably ventilated. Electrical Points to be provided. Consideration to be given to safety and security of residents: where possible install CCTV
Norms & Standards	Size and number of kitchen areas to be prescribed as ratio of unit numbers.
Required documentation for evidence	1. Building Plans
Corresponding References	This sub-item must be cross referenced to sub-item: 4.3.6 Materials
Practice Note Reference	Practice note on ratio to number of units to be developed.

Overarching Item	5.1 Communal Amenities
Sub-Item	**5.1.2 Common Area Amenities**
Principles	This requirement is relative to buildings with single rooms and communal facilities.
Guidelines	Developments with single rooms sharing communal bathroom and kitchen facilities should be provided with additional communal facilities as these are not provided internally within the unit. The range of these facilities will depend of the target market of the tenant and may include any / all of the following: Laundry Areas as per sub item 3.2.1 Recreational & play areas as per item 3.2.4 Communal kitchen areas with access to stoves and fridges Leisure Areas such as communal lounges, TV areas and games rooms The provision of work rooms, study areas etc
Norms & Standards	Common area amenities to be related to the scale of the development, the location of the development and the nature of the integration within a campus.
Required documentation for evidence	1. Building Plans
Corresponding References	This sub-item must be cross referenced to sub-items: 3.1.3 Provision of Open Space 3.1.4 Provision of Play areas
Practice Note Reference	